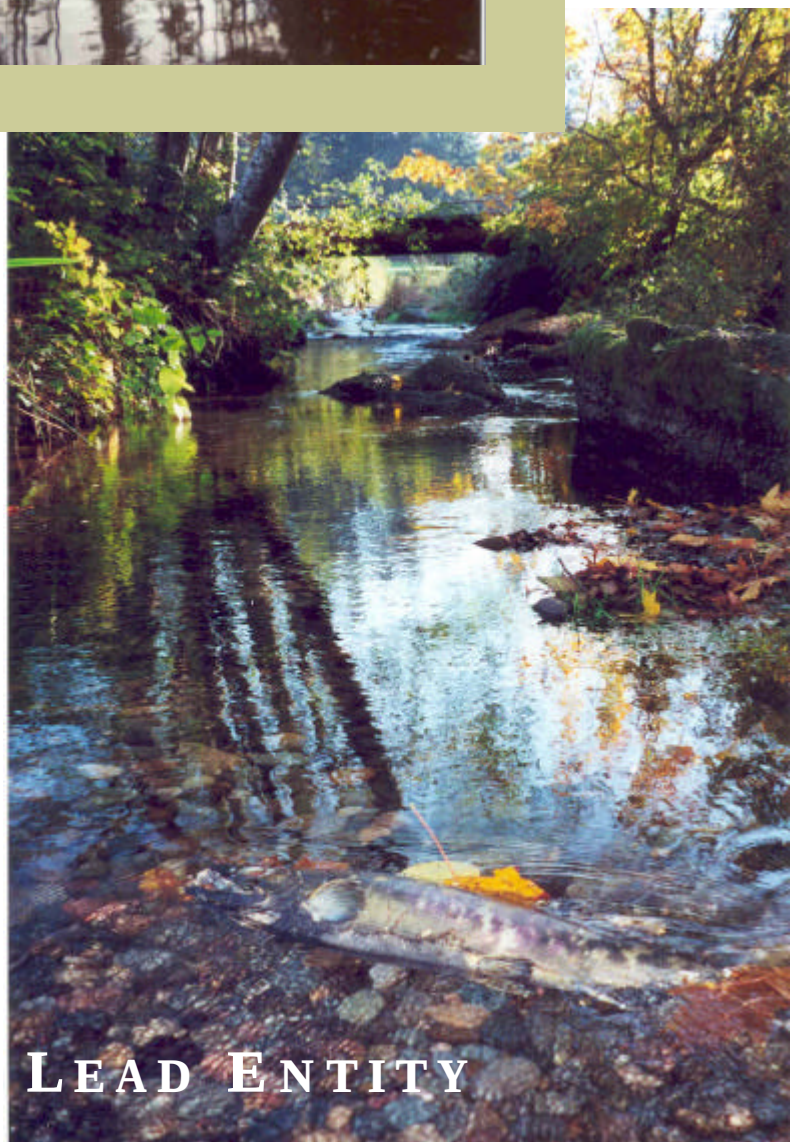
East Kitsap Peninsula Salmon Recovery Strategy



East WRIA 15 Lead Entity

The East Kitsap Peninsula Lead Entity

Salmon Recovery Strategy

Final Draft – Version July 9, 2004

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1. INTRODUCTION

Mission

The mission of the East Kitsap Lead Entity is to ensure local salmon habitat is preserved and restored to support salmon populations and human communities.

Goal

The goal of this strategy is to restore healthy, self-sustaining wild populations of the salmon species native to the streams and shorelines of Kitsap Peninsula. Healthy populations depend on the condition of local habitat, the level of harvest, hatchery practices and oceanic conditions. This strategy addresses local habitat conditions and is therefore an integral part of the larger regional salmon recovery effort. As our knowledge increases and as habitat conditions change, this strategy will be updated.

Objectives

- **Increase population levels:** Population numbers in many streams are depressed due, in part, to years of habitat degradation that has resulted in lower quality habitat, loss of spawning and rearing habitat and the survival of fewer smolts per spawner.

- **Maintain geographically diverse populations:** Salmon are native to most streams on the Peninsula and maintaining widely distributed populations is critical to genetic diversity and to ensuring that rare, catastrophic events don't eliminate the population. Individual stream populations may be devastated by occasional natural or human-caused events but recolonization from nearby streams will occur if healthy populations are encouraged in all historic salmon streams.

- **Promote the preservation and restoration of healthy, functioning ecosystems:** Salmon depend on healthy ecosystems and healthy ecosystems depend on salmon. Salmon are "indicator" species because they depend on a healthy watershed, not just an intact streambed. Likewise, salmon contribute to the overall health of watersheds and estuaries by providing ocean-derived nutrients to plants and animals.

- **Increase public understanding and support for salmon recovery:** Salmon are a vital part of the natural and cultural history of this region. Restoring salmon will require the support of the citizens who live here, and their

support depends on an understanding of the importance of watershed and nearshore health to salmon.

Local Conditions

The Kitsap Peninsula provides a uniquely diverse geography for salmon. Between the backbone of the peninsula and the shoreline, a narrow strip of land results in many short streams rather than a single large river system. The size of the peninsula, and the many small estuaries also provides an extensive and very diverse shoreline.

The quantity of fresh water draining the east side of the peninsula and the number of salmon utilizing the habitat are roughly the same as is found in a major river draining a similar sized territory. However, rather than flowing into a single large river, the water runs through many independent, short streams, directly into the Puget Sound. Salmon spawn and rear in 125 of these streams. Though small, the streams are highly productive for salmon because of their low gradient and extensive associated wetlands. Our geography results in spatially diverse salmon populations, widely distributed in many small streams throughout the region. Spatial diversity is a key component of healthy salmon populations and will be critical to regional salmon recovery.

The numerous streams in East WRIA 15 primarily support chum and coho salmon, steelhead, and cutthroat trout. In addition, low numbers of spawning adult chinook are observed on a regular basis in larger East WRIA 15 streams. These streams are not considered "primary spawning habitat", but are still utilized at certain times by wild Chinook. In many of these instances, the origin of the naturally spawning chinook currently present is most likely due to strays from nearby hatchery production. It is unknown whether, or to what extent, adult chinook returns are the result of natural spawning. Pink salmon are occasionally found as strays in East Kitsap streams. East WRIA 15 known stocks of salmon, steelhead and cutthroat distribution is identified in the Salmonid Habitat Limiting Factors (Haring 2000) and the 2003 Kitsap Salmonid Refugia Report (May 2003).

At least as or more important as the 240 miles of freshwater salmon habitat in this area is the 360 miles of marine shoreline on the east side of the Kitsap Peninsula. This nearshore habitat plays a critical role in the productivity of salmon stocks throughout Puget Sound. All salmon species, but particularly chinook and chum, spend many months as juveniles feeding in the highly productive nearshore waters in preparation for their ocean migration. Although the importance of estuaries and other nearshore habitats to salmon have been largely underestimated in the past, we are now discovering that these marine environments are every bit as important to salmon productivity as the freshwater streams where they are born.

The east side of the Kitsap Peninsula constitutes almost half of the nearshore habitat in central and south Puget Sound. The many estuaries and other marine habitats in this stretch of shoreline are used not only by the salmon produced in our own streams but also by juveniles from major rivers throughout Puget Sound as they migrate towards the open ocean. The Kitsap shoreline provides the safest migration route for small fish and use of this migration pathway by juveniles from east Sound rivers is well documented. The Kitsap shoreline is probably even more important today than in historic times due to the highly urbanized and loss of habitat in the east shoreline of Puget Sound. One result of the large number of streams that drain into the Kitsap Peninsula marine shoreline is an unusually diverse nearshore habitat with many small and medium sized estuaries, spaced relatively closely along the coast. This distributed network of estuaries provides a rich and relatively easy migration path for young salmon.

Challenges of a Diverse Geography: While a diverse geography may be beneficial for salmon, it creates some challenges for habitat restoration and management. Working within a single, large drainage basin results in closer ecological connections and a greater ability to extrapolate trends from sampling efforts. It also facilitates closely coordinated restoration projects and the leveraging of individual efforts. Having many small, independent drainages creates greater challenges for restoration efforts. Sharing a drainage basin provides a unifying theme around which local citizens and entities can organize. When an area the size of the Kitsap Peninsula contains dozens of small independent basins rather than a single large one, coordination among local entities requires a special effort and commitment.

Salmon recovery efforts have historically been organized around watershed groups that focus on freshwater habitat. If these efforts address nearshore issues at all, they do so only to the extent of the river estuary. The prominent role played by nearshore salmonid habitat on the Kitsap Peninsula provides the challenge of identifying a new model for organizing recovery efforts that specifically targets nearshore habitat as a priority. Taken together, these attributes indicate the critical importance of a coordinated effort to salmon recovery and the need to be innovative and energetic in our response.

2. PRIORITIES FOR RECOVERY ACTIONS[1]

Salmon recovery will require the actions of many people and must occur throughout the historic range of salmon. The decline of salmon came about, in part, due to the gradual degradation of habitat in nearly all the watersheds that historically supported salmon. Salmon recovery will require the gradual restoration and preservation of habitat at the same geographic scale. However, the need to restore salmon populations quickly and to use salmon recovery dollars efficiently requires us to give priority first to those actions that have the greatest effect on increasing population numbers and diversity of salmon. To prioritize actions, the following factors were considered:

- **Benefit to Salmon**
- **Geographic Location**
  - **Watershed Prioritization**
  - **Nearshore Prioritization**
- **Project Type Priorities**
- **Priorities within Watersheds**
- **Education, Outreach and Partnerships**

- **Benefit to Salmon**

The most important factors to consider in prioritizing actions are the number of fish and diversity of species that will be affected. Actions that benefit large numbers of salmon and multiple species are the highest priority. While ESA-listed species are a high priority, the emphasis of this strategy is a multi-species, ecosystem approach.

- **Geographic Location**

Watersheds and nearshore habitats that support the greatest number and diversity of salmon receive the highest priority for action. Likewise, habitats that support state or federally listed declining species, such as Puget Sound chinook, will receive priority.

- **Watershed Prioritization**

  The 125 salmon bearing streams on the east Kitsap Peninsula differ from each other in the number of salmon stocks they sustain and the number of fish they are capable of producing. Resources available for salmon recovery activities are

[1] Refer to Appendix C, which explains how these priorities fit within the Lead Entity Evaluation and Prioritization of SRFB Project Proposals. There is some overlap between the criteria used for evaluating projects and this strategy. The SRFB ranking factors are (with weight in parenthesis): Benefit to Salmon (40%), Certainty of Success of Project (30%), Consistency with the East Kitsap Peninsula Salmon Recovery Strategy (15%), Education, Outreach and Partnership (10%) and Cost Appropriateness of Project (5%).

finite and should therefore be distributed strategically in those places where it will have the greatest impact on preserving and restoring the diversity and productive capacity of our watersheds. To achieve this objective, the east Kitsap Peninsula strategy places the greatest priority on streams that have been identified as important salmon refugia, harboring the greatest diversity, productive capacity and quality habitat.

These priority watersheds were identified using information from a number of sources including the *Kitsap Peninsula Salmonid Refugia Study* (Kitsap 2003), the *Salmonid Habitat Limiting Factors for WRIA 15 East* (Haring 2000) and the *Watershed Analysis for the Development of Salmonid Conservation and Recovery Plans Within Pierce County* (Pierce County 2001).

Habitat for Puget Sound chinook, listed as threatened under the Endangered Species Act (ESA), receives the highest priority for preservation and restoration. Chinook utilize the largest streams on the Peninsula. These streams also support the highest diversity of salmonids and the greatest productive capacity for all species.

Watersheds are prioritized in recovery tiers based on their salmonid diversity, habitat quality and watershed size (See Appendix A). A flow chart that describes how watersheds were assigned to tiers is provided in Figure 1 in Appendix A. The ranking scheme reflects the best available data we have at this time and it will be updated as better information becomes available.

Tier	***Watersheds***
1	Coulter, Rocky, Chico, Gorst, Minter, Nearshore
2	Blackjack, Burley, Crescent, Curley, Dogfish, Grovers, Ollala
3	Anderson, Barker, Big Scandia, Clear, Eglon/Silver, Steele, Carpenter, Illahee
4	Artondale, Beaver, Dutcher, Fletcher, Fragaria, Goodnough, Johnson, Klaebel, Lackey, Mark Dickson, McCormick, Mosher, Mosquito Bay, Murden Cove, North (Donkey), Olney, Purdy, Ross, Sam Snyder, Silver, Strawberry, Sullivan Gulch, Wilson (Southworth), Wollochet
5	all other salmonid streams

Refer to Appendix B for the Watershed Integrity Index Calculations and flow chart

Table 1. Watershed Prioritization

➢ Nearshore Habitat Prioritization

Nearshore habitat is critical to juvenile rearing and migration for all species of salmonids. In this document the nearshore includes both estuaries and marine shoreline areas, upland and backshore areas that directly influence conditions along the shoreline, and from the upper extent of the tidal influence to the lower boundary of the photic zone. Different nearshore habitats are used by salmonids for different purposes including feeding, shelter, travel corridors and physiological adjustment to salt water. Some habitats are more critical than others are, such as estuaries, salt marshes, eelgrass beds and forage fish spawning and holding grounds.

In addition to local salmonids, juvenile salmonids from throughout Puget Sound are known to utilize the shore of Kitsap Peninsula as a nursery and migration route as they travel to the open ocean. The marine shoreline of this area therefore plays a critical role in the recovery of salmon populations in Puget Sound. For this reason, the nearshore is a high priority area for protection and restoration.

To help guide the development and selection of recovery actions within this high priority area the following elements will be used to develop a comprehensive nearshore strategic plan[2]:

1. Identify and prioritize habitat types and attributes needing protection and conservation. Completing an inventory of habitat types is the first step in an effort to protect existing important habitats.

   In general, protecting portions of ecosystems with functioning natural processes has a high chance of success. Simply protecting habitats without protecting the underlying processes have a low chance of contributing to ecosystem recovery. Areas targeted for protection will be based upon a thorough analysis of critical and vulnerable natural areas. Those areas that are in imminent risk of being converted to an alternate use should have priority for protection.

2. Identify what ecosystem processes are impaired and where they are impaired. This would include:

[2] Element numbers 1-5 are cumulative. Currently, a nearshore assessment has been completed for Key Peninsula, Gig Harbor, and Islands (KGI) Watershed in Pierce County and Bainbridge Island is finalizing a nearshore assessment. A gap exists for the remaining East WRIA 15, which includes the East portion of Kitsap County. In the meantime, the Lead Entity has used the nearshore assessments that have been completed along with the Limiting Factors Analysis to identify and prioritize specific actions in the nearshore (Appendix B). This is only intended as a starting place to help guide protection and restoration actions. When an assessment is complete for the entire area, the list will be replaced with a list based on the findings and results of all three assessments.

a. An analysis of historic and current conditions to identify the changes in habitat that have occurred. The historic condition of the nearshore ecosystem may provide the best template for restoration planning because it indicates where habitats formerly occured, their natural, size, shape, community composition, and connections to other elements of the ecosystem. Critical questions to be addressed is how much of various types of ecosystems were present, where were they located, and how were they organized/arranged?
b. An assessment of current conditions to obtain data that can be used to compare historic conditions and assess change in the ecosystem condition.
c. Comparison of historic and current conditions to document changes that have occurred (Understanding that there are constraints that now exist).

3. Measure spatial and temporal utilization of the nearshore habitats by salmonids and compare habitat conditions and salmonid use among different habitat types.

4. Identify specific actions needed. The following actions are listed in order of certainty with which they can contribute to ecosystem recovery (most certain to contribute to the least certain):

   - Protection[3]
   - Restoration
   - Rehabilitation
   - Substitution/Creation

5. Develop appropriate criteria and prioritize habitat types to be protected and restored.

   The LE has identified and prioritized a preliminary list of nearshore actions that can be found in Appendix B. The list of action recommendations are to be used as a guide for the LE and should be considered "interim" until more and better data is developed to prioritize habitat types in East Kitsap.

6. Monitor the effectiveness of habitat protection and restoration projects.

[3] Protection should include policy, regulatory and non-regulatory measures.

- **Project Type Priorities**

Preserving and protecting existing high quality habitat is critical to future recovery. Restoring degraded habitat is a relatively long and expensive process, making preservation of existing habitat and restoring access to blocked habitat the highest priority.

However, the extent of habitat degradation is such that salmon will not recover unless significant restoration occurs. Restoration of ecosystem processes will result in long-term benefits to salmon with a higher certainty of success than projects that simply replace habitat components or rely on engineered solutions. As a result, priority is given to restoration projects that address or take into account ecosystem processes. This is not to say that replacing habitat components is unimportant. Restoring ecosystem processes such as large woody debris (LWD) recruitment may require a century or more. Therefore temporary or engineered solutions may be necessary, such as installing LWD while a young riparian forest is maturing.

When prioritizing projects, the relative impact of the project on salmon should always be foremost in consideration. For example, a preservation project that protects relatively few salmon may be less important than a restoration project that improves habitat conditions for thousands of fish.

- **Priorities within Watersheds**

Within each watershed, the known limiting factors for salmonids have been prioritized in the report *Salmonid Habitat Limiting Factors in WRIA 15* (Haring 2000). Projects will be prioritized based on these lists. Project proponents are encouraged to strategically select projects that address the most important limiting factors. Additional studies have been or will be conducted to further refine the list of known limiting factors and these additional studies should be used to update the prioritized project lists.

- **Education, Public Outreach and Partnerships**

Healthy salmon populations require an informed and involved public, with communities dedicated to stewardship of their own watersheds. Greater awareness will lead to stronger protection and recovery of salmon. There is also a much-needed connection and partnering among different agencies and public interests. Therefore, projects that are beneficial to salmon populations increase education and improve coordination among government agencies and interests will receive increased consideration when the projects are prioritized. These actions are seen as paramount for fostering public stewardship and protecting and restoring salmon populations. Much of the human population is concentrated in smaller watersheds

(lower geographic priority), but the positive impact on salmon recovery of building public support makes projects in these watersheds vital to future recovery efforts.

The following are examples of Education, Public Outreach and Partnerships that could be used to foster public stewardship:

- **Community Support**: People in the community support the project mission. If there is not backing for the project how will you arrive to get community support?
- **Education**: There is a continual need to connect ourselves as individual, corporate, and community citizens to salmon recovery. Greater awareness will lead to stronger protection of salmon habitat. Examples of education include involving children and adults in hands-on workshops, open houses, or developing educational materials such as kiosks and newsletters about the project and salmon recovery.
- **Volunteers**: Volunteer opportunities provide information and education, fosters stewardship and can help reduce the level of financial support needed. Examples of existing volunteer opportunities include stream teams, school projects or salmon enhancement groups.
- **Public Access**: There should be places where, with minimal damage or degradation, citizens can view evidence of salmon recover projects to encourage good stewardship. While public access is important, we must ensure that increased access does not further degrade water quality or habitat. Projects will not be penalized if access is not appropriate or possible, yet the benefits to salmon are high.
- **Citizen Groups**: Citizen groups mostly comprised of citizens within a particular watershed that support and encourage natural resource protection efforts. They could be a formalized, not-for-profit organization for a stream, a grass-roots neighborhood group, watershed stewardship group, a sub-area planning committee and the like. The importance and impact of these existing groups should be recognized and leveraged into broader public support for salmon recovery goals.
- **Native American Culture:** The region's Native American tribes have fished for salmon in the waters of East Kitsap for thousands of years and view salmon recovery as essential. Examples could include sites or projects of special significance to the local Native American tribes.
- **Partnerships:** Partnerships encourage cooperation and coordination between multiple agencies and public interests. Projects should encourage partnerships between multiple agencies, non-government and school groups.

Volunteers planting trees at the Gorst Creek restoration site

3. MONITORING

Progress in salmon recovery requires monitoring to determine the success of past efforts and to allow us to adapt our methods with the lessons learned. Every recovery action should be considered an experiment with an explicit objective being to learn how to do things better the next time. Monitoring allows you to manage adaptively. All recovery projects undertaken in this region should include a monitoring component and the results should be shared with other groups and community members to celebrate successes and to share the knowledge gained when projects do not function as planned.

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Haring, D. 2000. Salmonid Habitat Limiting Factors in WRIA 15 East. Washington State Conservation Commission. Olympia, WA.

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PSNERP 2003. Guidance For Protection and Restoration of the Nearshore Ecosystems of Puget Sound (Draft 5, 5/2/03)

APPENDIX A

Watershed Geographic Prioritization Method Calculations, Flowchart and Watershed Maps

APPENDIX A

WATERSHED GEOGRAPHIC PRIORITIZATION METHOD

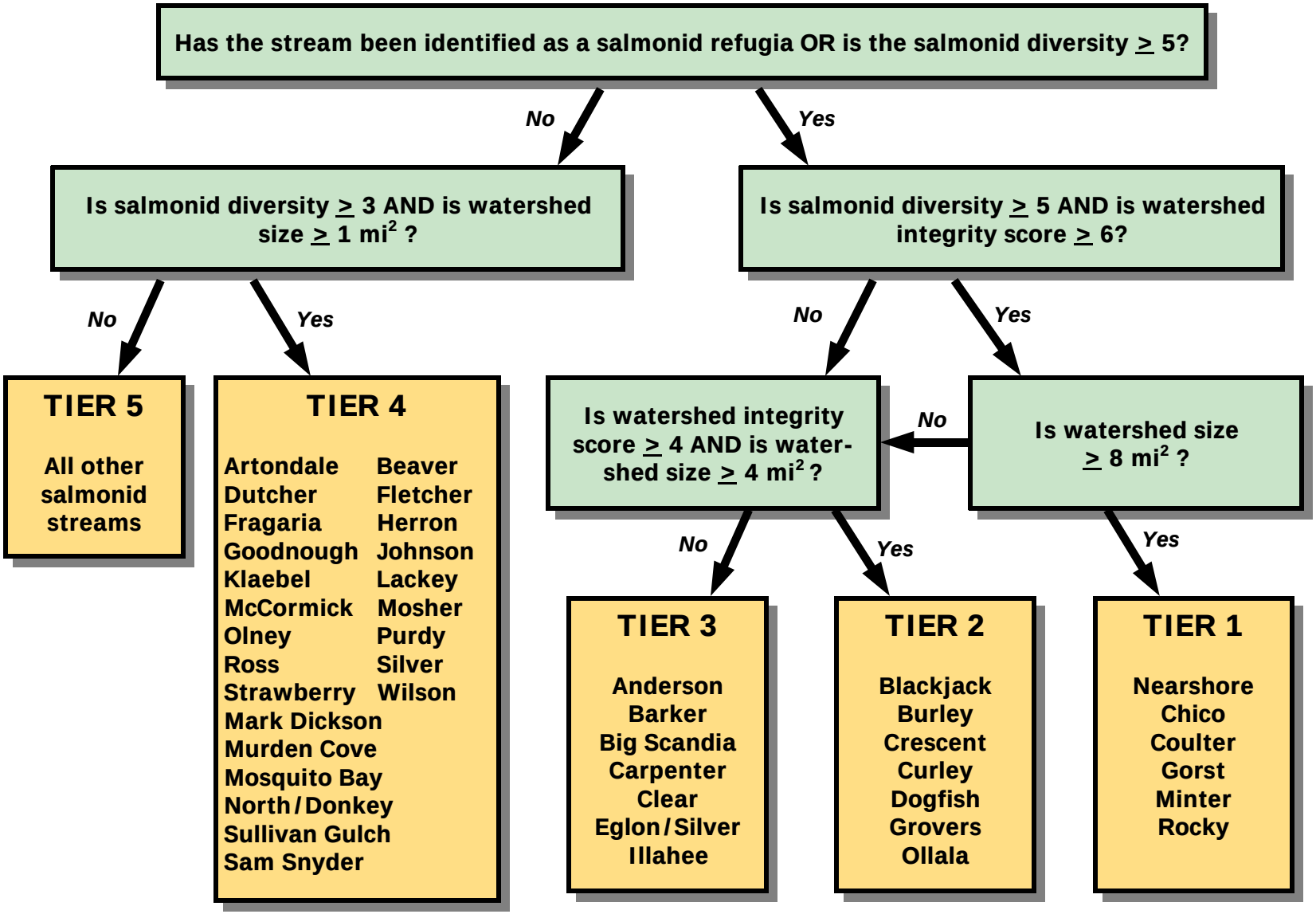
Watershed Integrity Index Calculations: Impervious surface area and forest cover in a watershed are commonly used to gauge the point at which significant harm is likely to happen to a stream. The following metrics were used and the index scores added together (A score of 8 is the maximum):

Impervious Area		Forest Area	
% Imp. Area	Index #	%Forest Area	Index #
0-3	4	70+	4
3-8	3	60-70	3
8-15	2	50-60	2
15+	1	50 and below	1

Watershed Integrity Index Calculations

Stream (watershed size (mi^2))	Impervious Surface Area		Forest Cover		**Watershed Integrity Index**
	%	Index Score	%	Index Score	
Coulter (11.70)	0.2	4	78.1	4	**8**
Rocky (12.12)	1.5	4	71.7	4	**8**
Grovers (6.76)	1.6	4	73.3	4	**8**
Olalla (7.93)	3	4	63.1	3	**7**
Eglon/Silver (2.34)	1.1	4	66.5	3	**7**
Minter (10.25)	2.6	4	60.4	3	**7**
Gorst (9.53)	7	3	74.6	4	**7**
Anderson (Gorst) (2.04)	3.7	3	77.6	4	**7**
Chico (16.32)	6	3	68.3	3	**6**
Big Scandia (2.27)	4.6	3	69.9	3	**6**
Carpenter (2.95)	6.18	3	66.4	3	**6**
Blackjack (13.48)	13.5	2	53.3	2	**4**
Curley-Salmonberry (14.25)	9.6	2	58	2	**4**
Dogfish (8.50)	12.7	2	57.9	2	**4**
Burley (10.83)	10.6	2	55.1	2	**4**
Illahee (1.28)	16.7	1	53.9	2	**3**
Barker/Hoot (3.95)	22.2	1	42.7	1	**2**
Steele (5.01)	16.7	1	46.4	1	**2**
Clear (8.59)	29.3	1	47.9	1	**2**

Percent forest cover and impervious surface area were based on 2001 Landsat 7 ETM+ (30 meter pixel resolution)



Appendix A: Figure 1: The flowchart indicates how watersheds were assigned to geographic tiers. The watershed integrity score was calculated according to the guidelines on the previous page.

APPENDIX B

Preliminary Nearshore Action Recommendations and Prioritization Criteria

(Note: A preliminary list of nearshore conservation and restoration areas for Bainbridge Island is included but the list has not been scored with the criteria yet. The nearshore working group will update this list as we gain more knowledge)

APPENDIX B

PRELIMINARY NEARSHORE ACTION RECOMMENDATIONS: The following criteria, which was adapted from Correa 2002, was used to prioritize **preliminary** nearshore actions identified in East Kitsap WRIA 15. The actions were identified using the KGI[3] Watershed Nearshore Salmon Habitat Assessment, Draft Bainbridge Island Nearshore Assessment, Limiting Factors Analysis for East WRIA 15 and by professional local knowledge[4]. This list is intended to be a starting place and as we gain more knowledge the criteria and list will be updated based on the findings. If additional actions are identified, the criteria can be used prioritize them relative to the actions in this list. Therefore, these criteria and list of action recommendations should be considered as **"interim"** until more and better data is developed.

In addition to the list of nearshore actions, the following general nearshore actions should be considered when identifying nearshore protection and restoration projects or implementing policy and/or regulatory decisions.

- Protection of naturally eroding bluffs
- Removal of intertidal fill
- Removal of shoreline armoring or replacement with alternatives such as large woody debris and/or riparian plantings
- Protection of estuaries
- Proper treatment of stormwater and wastewater
- Protection and/or restoration of salt marsh habitat
- Removal of unused creosoted pilings

Prioritization Method

<u>Proximity to priority watersheds, maximum 3 points</u>
The proximity to priority watersheds, as determined by the Watershed Geographic Prioritization Method (Appendix A) was evaluated as follows:

- If the nearshore project action was within 0.0 to 1.0 miles from a Tier 1 estuary, the action received 3 points.
- If the nearshore project action was within 0.0 to 1.0 miles from a Tier 2 estuary, the action received 2 points.
- If the nearshore project action was within 0.0 to 1.0 miles from a Tier 3 estuary, the action received 1 point.

[3] KGI refers to the Key Peninsula, Gig Harbor, and Island Watershed in Pierce County.
[4] Our knowledge of nearshore habitat use by salmonids is relatively basic but is expanding and the database on nearshore salmonid habitat conditions is also sparse. The KGI and Bainbridge Island Nearshore assessments will help fill those gaps. However, an assessment is required for the remainder of East Kitsap before a comprehensive list of actions can be developed.

Spatial Scale, maximum 5 points

The size of the benefit was evaluated as follows:

- The action received 5 points if the project protected and/or restored greater than 10 acres of habitat.
- The action received 4 points if the project protected and/or restored 5 to 10 acres of habitat.
- The action received 3 points if the project protected and/or restored 2 to 5 acres of habitat.
- The action received 2 points if the project protected and/or restored 1/2 to 2 acres of habitat.
- The action received one point if the project protected and/or restored less than 1/2 acre of habitat.

Ecological Scale, maximum 5 points

Ecological scale was designed to evaluate impacts to nearshore processes. If the action addressed multiple processes, species and life histories, it received a higher value. For example, if an action recommendation involved estuary restoration that would affect both nearshore and riverine processes, such as dike removal in the lower floodplain, it received a higher score than one that involved a single process, such as the removal of individual creosoted pilings, which systematically received one point.

Temporal Scale, maximum 3 points

Temporal scale was designed to evaluate the longevity of a benefit(s) gained through implementation of a recommendation. For example, if the action recommendation restored a nearshore process that provided long-term benefits, it received a higher score than a project that provided short-term benefits and required considerable maintenance.

ID	Location	Action Type	Action Recommendation	Criteria (Correa 2002)					Comments	Aerial Photographs/historical charts
				Proximity to Priority Watersheds (max 3)	Spacial Scale (max 5)	Ecological Scale (max 5)	Temporal Scale (max 3)	Total (max 16)		
Protection Projects (No Scoring)										
7	Doe-Keg-Wats	Protection	Protect 35 acre pristine Salt Marsh. Look into the acquiring a conservation easement to protect salt marsh.	Protection Actions have not been scored by the Nearshore working group at this time.					Edmonds oil spill hit this marsh in January 2004. Most of the salt marsh belongs to The Suquamish Tribe and part belongs to Camp Indianola.	 Doe-Keg-Wats Marsh (Project ID #7)
8	Nooschkum Point, Miller Bay	Protection	Protect 3 acre spit and marsh. Good candidate for conservation easements. Approach Kitsap County to purchase marina (North of point)						There are 7 cabins located adjacent to the spit. The spit is privately owned but currently in open space designation.	
12	Dogfish Bay Salt Marsh	Protection	Protect Salt Marsh located at NE Virginia Pt Road. Look into a conservation easement. Investigate culvert at road to determine if there is a tidal constriction.						Private ownership (currently Donald Monroe)	
18	Mosher Creek Estuary, Dyes Inlet	Protection	Protect estuary						Possible restoration. Need more information.	
36	Southworth Point	Protection	Protect habitat						Ecology photo: 105148	
46	Burley Lagoon/Burley Creek (Upper Lagoon)	Protection	Protect functioning estuary habitat							
47	Minter Creek Estuary	Protection	Preserve riparian zone. Pursue conservation easements						Identify specific actions or move to general recommendations?	
52	Rocky Bay	Protection	Protect functioning estuary habitat						Tier 1 Stream	

ID	Location	Action Type	Action Recommendation	Criteria (Correa 2002)					Comments	Aerial Photographs/historical charts
				Proximity to Priority Watersheds (max 3)	Spacial Scale (max 5)	Ecological Scale (max 5)	Temporal Scale (max 3)	Total (max 16)		
53	Coulter Creek Estuary	Protection	Investigate what can be restored after the hatchery closes down. Protect functioning habitat	Protection Actions have not been scored by the Nearshore working group at this time.						
15	Illahee Creek Estuary	Protection	Protect small salt marsh. Approximately .73 acre						There is a current permit to build a 5000 ft^2 house directly on the spit.	
42	Wollochet (Bitter) Creek 15.0080/0081, Garr Creek 15.0080, and tributaries	Protection							Need more information. Artondale is somewhat restricted. Wollochett restricted	

ID	Location	Action Type	Action Recommendation	Criteria (Correa 2002)					Comments	Aerial Photographs/historical charts
				Proximity to Priority Watersheds (max 3)	Spacial Scale (max 5)	Ecological Scale (max 5)	Temporal Scale (max 3)	Total (max 16)		
Restoration Projects										
21	Chico Creek Estuary, Dyes Inlet	Restoration	Replace culverts at SR3 & Kittyhawk Dr. crossings w/ bridges of sufficient size to allow unrestricted fish passage at all flows, as well as passing sediment and debris. This would allow removal of upstream DOT trash rack, which is a fish passage barrier when clogged w/ accumulated debris. Restore stream utilization of historic estuarine delta. Estuarine conditions downstream of the culvert at the mouth of Chico creek are generally good, although the extent of estuarine influence is limited by the routing of the creek through a confined culvert at the mouth. Review of historic aerial photos indicates the mouth of the creek may have historically moved across a broader estuarine interface. Estuarine function could be improved by increasing the number and/or width of openings under SR 3, which may also eliminate the need for DOT to maintain the trash rack upstream. Approximately 20 acres	3	5	5	3	16	This is a huge project and will require multi-agency participation. Possibly a good PSNERP project.	 **Chico Creek Estuary (Project ID # 21)**
24	Gorst Creek Estuary 15.0216 and extension as 15.0224, Unnamed (Bailey's) Creek 15.0217, Jarstad Creek 15.0218, Parish Creek	Restoration	Restore estuarine function (will require acquisition of historic floodplain/estuary from the mouth to Jarstad Park). Pull back intertidal fill at old Port of Bremerton landfill north of Gorst; restore natural shoreline configuration and function. Remove collapsed riprap and debris (from roadside armoring from intertidal area. Protect highly productive, shallow intertidal areas of Sinclair Inlet; avoid armoring of additional armoring where practicable. Reconnect estuarine component north of Gorst Creek that was cut off by construction of the rail line.	3	5	5	3	16	Paul Dorn will provide better description of all the actions needed in the Gorst Area of Sinclair Inlet.	 **Gorst Estuary (Project ID #24)**

ID	Location	Action Type	Action Recommendation	Criteria (Correa 2002)					Comments	Aerial Photographs/historical charts
				Proximity to Priority Watersheds (max 3)	Spacial Scale (max 5)	Ecological Scale (max 5)	Temporal Scale (max 3)	Total (max 16)		
6	Carpenter Creek Estuary, Appletree Cove	Restoration	Replace undersized culverts under South and West Kingston roads with bridges to restore natural tidal hydrology and estuarine functions to approximately 26.2 acres. Remove intertidal fill and restore saltmarsh and riparian habitat where disturbed.	1	5	5	2	13	South Kingston Road culvert scheduled to be replaced Summer 2005 (SRFB Grant).	
35	Little Clam Bay, Manchester	Restoration	Replace tide gate with a bridge and restore historic estuary/nearshore in Little Clam Bay. Would restore over 23 acres of estuary habitat functions.	0	5	5	3	13	Currently Little Clam Bay is being used to culture Olympia oysters.	 Little Clam Bay showing tidegate (Project ID #35)
54	East Oro Bay, Anderson Island (AU 14.09)	Restoration	Remove dike that separates a large marsh and wetland from the rest of East Oro Bay. Removal of the dike would greatly expand the area of saltmarsh habitat and substantially improve habitat.	0	5	5	3	13	Private property and unwilling landowner	 East Oro Bay, Anderson Island showing tidegate (Project ID #54)

ID	Location	Action Type	Action Recommendation	Criteria (Correa 2002)					Comments	Aerial Photographs/historical charts
				Proximity to Priority Watersheds (max 3)	Spacial Scale (max 5)	Ecological Scale (max 5)	Temporal Scale (max 3)	Total (max 16)		
38	Olalla Creek 15.0107 and Unnamed 15.0108-0113	Restoration/Protection	Pursue acquisition of house and property at upper end of estuary that constricts tidal interchange in the Olalla Creek channel and in Unnamed 15.0108; reconfigure to restore estuarine and channel function. Work with landowner to keep livestock out of the saltmarsh and pursue conservation easements. Remove riprap fill on the estuary at the boat ramp. Approximately 29.5 acres	2	5	4	2	13		 Olalla Creek Estuary (Project ID # 38)
1	Blakely Harbor, Bainbridge Island	Restoration	Remove two jetties, rip-rap wall, powerhouse structure and piles. Remove mill waste (metal shaving debris) and restore salt marsh and plant riparian vegetation.	0	5	4	3	12	Bainbridge Island acquired. There is some opposition to the restoration.	 Blakely Harbor (Project ID #1) showing abandoned powerhouse structure, jetties and pilings.
11	Keyport Creek 15.0276, Styles Lagoon, Liberty Bay	Restoration	Restore natural tidal regime in Styles Lagoon. Currently impounded by tidegate (Installed by WDFW). Restore marine sediment quality and water quality off the mouth of the creek. Approximately 20.9 acres	1	5	4	2	12		 Styles Lagoon, Keyport, Liberty Bay (Project ID #11). Restore natural tidal regime by removing tidegate.

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14	Steele (Crouch) Creek Estuary (Illahee Road), Burke Bay	Restoration	Restore natural rates of recruitment of shoreline slide materials to the nearshore south of Steele Creek; identify options to reduce the intrusion of Illahee Road into the historic intertidal area and/or reduce the extent of armoring of the roadfill. Investigate bridge on Illahee Road for tidal restriction; expand if necessary. Approximately 20 acres	1	5	4	2	12		
19	Clear Creek 15.0249, WF Clear Creek 15.0250, and Unnamed 15.0251-0254, Dyes Inlet	Restoration	Replace culvert at Bucklin Road crossing with a bridge of sufficient length to restore natural sediment transport from Clear Creek to Dyes Inlet. Pursue acquisition to improve buffer around the estuary. Approximately 9.5 acres.	1	4	4	3	12	Excellent education opportunity by putting in a pedestrian bridge and connecting marsh to the rest of Clear creek (extensive trail system)	 **Clear Creek (Project ID #19) Replace culvert at Bucklin Road with bridge and protect buffer around estuary.**
20	Clear Creek Estuary, Dyes Inlet	Restoration	Pursue conservation easement for lagoon located southeast of mouth of Clear Creek. Improve riparian zone with native plantings. Investigate possibility of channel restoration.	1	4	4	3	12	Peter Namtvedt Best indicated his family may be interested in a conservation easement on part of the lagoon. WDFW will be sampling as part of their pocket estuary project. Chum are know to use the lagoon.	 **Clear Creek Estuary Lagoon (Project ID #20). Pursue conservation easement, restore riparian habitat. (possible channel restoration).**

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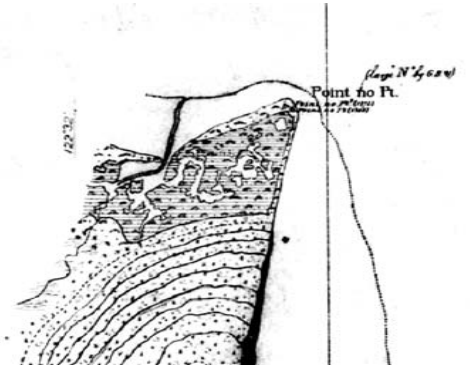
				Proximity to Priority Watersheds (max 3)	Spacial Scale (max 5)	Ecological Scale (max 5)	Temporal Scale (max 3)	Total (max 16)		
50	Whitman Cove, Case Inlet	Restoration	Restore natural estuarine function in Whiteman Cove by removing tidegates. Look into possibility of removing road? Would restore natural estuarine function to approximately 20 acres.	0	5	5	2	12	Look into ownership and how much the road is used.	See Below
				  **Whitman Cove (Project ID 50) - Photo 1 shows the two tidegates and the small lagoon and marsh in the bottom left that is separated from Whiteman Cove by a sheet pile wall (WSDOE Oblique Aerial Photos, 2000 Series). Photo 2 - Tidegate (one of two in Whiteman Cove.**							
3	Point No Point Wetland	Restoration	Conduct feasibility study to assess the potential of restoring estuarine functions to the point no point marsh. Restore as much of the salt marsh habitat as possible. Look at the possibility of re-establishing the connection of the marsh to Puget Sound (NW of the lighthouse). Approximately 25 acres.	0	5	5	1	11	Located in excellent nearshore refugia (May 2003). Most of the original marsh has been filled & developed. May be difficult to establish the original outlet due to development & changes in hydrology.	See Below
				  **Point No Point (Project ID #3). Figure on left shows the 1872 U.S. Coast Survey**							

ID	Location	Action Type	Action Recommendation	Criteria (Correa 2002)					Comments	Aerial Photographs/historical charts
				Proximity to Priority Watersheds (max 3)	Spacial Scale (max 5)	Ecological Scale (max 5)	Temporal Scale (max 3)	Total (max 16)		
40	Crescent Creek (Gig Harbor)	Restoration	Replace culvert with a bridge to restore tidal function. Evaluate potential removal of bank armoring at city park in Crescent Creek estuary. Assess the impacts of existing alterations to marine nearshore habitat in Gig Harbor; remediate impacts where possible. Protect remaining habitat through conservation easements or purchase. (~3 acres)	2	3	4	2	11	Highest quality habitat in Gig Harbor. City park is located adjacent and could be connected to restoration of estuary.	 Crescent Creek, Gig Harbor (Project ID #40)
41	North Creek Estuary (AU 2.07) (Gig Harbor)	Restoration	Pursue acquisition of business property to restore and daylight channel. Expand the park to connect with the restoration. Restore estuarine function in the lower portion of North Creek. Assess the impacts of existing alterations to marine nearshore habitat in Gig Harbor; remediate impacts where possible (~ 4.5 acres)	2	3	4	2	11		 North Creek Estuary, Gig Harbor
37	Harper Estuary, Yukon Harbor	Restoration	Option 1: Abandon road through marsh (Southworth section) to improve estuary functions. **Option 2** (Scored, more likely scenario): Replace undersized culvert with a bridge to improve estuary functions. Both options: Remove abandoned 400' long abandoned roadbed and restore salt marsh and remove or minimize unpermitted boat ramp. (Would restore natural esturarine function to approximately 7.5 acres)	0	4	4	2	10	Option 1 = 12 for total score (0,4,5,3). USACOE has completed a 10% feasibility study for this project. Do not have the funds to complete it.	 Harper Estuary Restoration (Project ID # 37)

ID	Location	Action Type	Action Recommendation	Criteria (Correa 2002)					Comments	Aerial Photographs/historical charts
				Proximity to Priority Watersheds (max 3)	Spacial Scale (max 5)	Ecological Scale (max 5)	Temporal Scale (max 3)	Total (max 16)		
34	Beaver Creek, Clam Bay, Manchester	Restoration	Restore the natural estuary at the mouth of Beaver Creek; this would involve removal of the dam at the lake outlet and may involve removal of contaminated sediments. Work with EPA/NOAA Fisheries/DOE/Navy to determine feasibility of restoring natural shoreline and nearshore condition in the extensively filled, bulk headed, and docked shoreline in Clam Bay; assess opportunities to reduce/eliminate creosote presence and exposure at the EPA-operated dock. Approximately 1.63 acre	0	3	4	2	9	Restoration plan for the Manchester Fuel Depot is in progress. Navy is the lead. Legacy funds.	
2	Manitou Beach, Murdon Cove, Bainbridge Island	Restoration	Improve tidal connection between high marsh and Murdon Cove. Regrade and restore high marsh.	0	3	3	2	8	Murdon Cove has some of the best habitat on the Island.	
4	Eglon Creek 15.0311 and Silver Creek 15.0312	Restoration	Conduct feasibility study to assess potential of relocating/reconfiguring the boat launch and parking at the mouth of the creek. Restore channel function through this reach by removing channel armoring and restore flood plain. Remove dilapidated wood bulkhead south of boat ramp. Put sign up to prohibit vehicles from driving on beach damaging forage fish spawning habitat. Approximately 1 acre	1	2	2	2	8	Once boat ramp at Point no Point is complete may be able to abandon this boat ramp. Located in area of excellent nearshore refugia (May 2003)	
27	Ross Creek 15.0209 and Unnamed 15.0210, Sinclair Inlet	Restoration	Replace culvert at the SR 166 crossing with bridge or a much larger culvert that will restore saltwater tidal influence upstream and flush accumulated sediments to Sinclair Inlet. Restore functional estuarine habitat; eliminate or reduce encroachment from existing development and reestablish functional riparian buffers. Approximately 1.5 acre	0	2	4	2	8		
30	Unnamed 15.0193, Port Orchard (Sinclair Inlet)	Restoration	Conduct feasibility study to look at restriction at Beach Drive. Protect estuarine salt-marsh habitat; evaluate opportunities to increase estuary function upstream of Beach Drive.	2	1	3	2	8	Look at fish usage. Ecology photo: 010512-125532	

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10	Dogfish Creek Estuary, Liberty Bay	Restoration	Remove pilings and debris (trash/rocks/bulkhead) along shoreline south of Lindvig Avenue. Work with businesses parking lots to restore riparian habitat and improve stormwater management.	2	1	2	2	7	Need to measure feet of shoreline restored.	
13	Steele (Crouch) Creek Estuary (Brownsville HWY Crossing), Burke Bay	Restoration	Replace culvert at the Brownsville Highway crossing with a bridge or larger culvert that restores natural tidal exchange and sediment transport, as well as unrestricted fish passage.	1	1	3	2	7		 Steele Creek Estuary (Projects ID 13 & 14)
43	Shaw Cove Spit (AU 5.10)	Restoration	Remove steel/wire framework lying partly on the upper beach and on the riparian shrub-scrub fringe above MHHW. (~.18 acre)	0	1	3	3	7		
23	Wright Creek 15.0225	Restoration/Protection	Replace culvert with bridges of sufficient length to restore tidal processes under SR3 and Navy railroad. Protect integrity of the only natural estuary remaining on the north shore of Sinclair Inlet.	1	1	3	2	7		
26	Ross Point, Sinclair Inlet	Restoration	Remove old homesite foundations, pilings, and associated debris from intertidal area south of Ross Pt. Remove unauthorized moorage, and creosote-treated pile rafting off Ross Pt.	0	1	3	2	6	One of the largest surf smelt areas.	
28	Blackjack Creek 15.0203, continued as Square Creek, Ruby Creek 15.0205, and unnamed	Restoration	**Option 1 (Scored)**: Restore riparian corridors as much as possible by pulling parking lot back as much as possible. Option 2 (See comments): Pursue purchasing businesses and relocate. Restore natural delta by removing fill and reestablishing riparian corridors.	2	1	2	1	6	Option 2: Total score would be 10 (2,2,4,2)	

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39	Colvos Passage (EMU 1;AU 1.03 Pierce County Habitat Assessment)	Restoration	Remove concrete vaults and bulkhead. Restore beach by removing fill and re-grading to natural contours followed by planting native vegetation. (Approximately 390 linear feet, about 0.55 acres of fill)	0	2	3	1	6	Sand lance documented. Superfund site from Manson Construction. May limit restoration potential.	
44	Raft Island ((AU 6.15)	Restoration	Remove failed wooden bulkhead. Replace deteriorating concrete bulkhead with bioengineered structure? Remove dilapidated wood and styrofoam float. (AU 6.15 ~220 linear ft, AU 6.17 ~ 200-300 ft)	0	1	3	2	6		
48	Glen Cove (AU8.10 & 8.16)	Restoration	Remove armoring at Camp Seymore. Remove old tires and concrete debris along shoreline. Remove 55 gallon barrels/drums used to stabilize the bank . Remove concrete bulkhead in AU 8.10 (~ 600 ft)	0	1	3	2	6		
55	Fox Island (AU 13.31)	Restoration	Remove abandoned ferry dock and restore natural shoreline.	0	1	3	2	6		
25	Anderson Creek 15.0211 and EF Anderson 15.0212	Restoration	Replace culverts with bridges to improve fish passage and process. Conduct feasibility study to look at reconfiguring stream to route it under the smallest width of the highway. Pursue purchasing property for reconfiguring stream (Old RV sales). Restore natural channel configuration, estuarine function, and natural sediment transport through the SR 166/16 corridor.	1	1	2	1	5	This project is problematic due to SR 166/16.	
31	Annapolis Creek 15.0202	Restoration	Replace restrictive culvert with larger culvert.	2	1	1	1	5		
45	Burley Lagoon/Purdy Creek Estuary (AU 7.12)	Restoration	Shoreline habitat improvement could be obtained by removing the debris and abandoned structure(s), and removing and replacing the riprap through bioengineering techniques. (~ 2.2 acres, rip rap ~230 ft)	0	2	2	1	5		
49	Mayo Cove (AU 9.11)	Restoration	Replace decaying bulkhead with alternative. Remove old boats from marsh vegetation.	0	1	2	2	5		

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51	Vaugn Bay (AU 12.4)	Restoration	Protect functioning estuary habitat	0	1	2	2	5		
16	Dee (Enetai) Creek Estuary15.0264	Restoration	Investigate soft bank alternatives to concrete bulkhead on the banks. Improve water quality (high bacteria). Educate local community about water quality issues. Improve riparian zone with vegetative plantings.	0	1	2	1	4	Health District is considering posting with a Health Warning due to high bacteria counts. Ecology 924-101928	
32	Sullivan (Karch, Karcher) Creek 15.0200	Restoration	Replace culvert at Beach Drive with bridge or larger culvert that will provide unrestricted outflow during high flows and which will restore saltwater exchange into the lower end of Sullivan Creek. Remove invasive vegetation.	0	1	2	1	4		
5	Applecove Point	Restoration	Conduct a feasibility study to look at restoring salt marsh at Applecove Point (possibly salt water has been cut off by tidegate). Protect remaining marsh habitat from further development. Approximately 6.14 acre. Located in area of excellent nearshore refugia (May 2003)	0	4	N/S	N/S	N/S	Need more information about the saltmarsh and tidegate. Field trip planned.	
22	City of Bremerton Marine Shoreline: Oyster Bay, Mud Bay, Port Washington Narrows, Ostrich Bay, Phinney Bay	Restoration	Conduct feasibility study to identify possible restoration projects. Monitor Jackson Park and Charleston restoration projects.	N/S	N/S	N/S	N/S	N/S	Need further information.	
33	Waterman	Restoration	Protection and possible undersized culvert	N/S	N/S	N/S	N/S	N/S	Need more information. Investigate and rate later.	
Completed Restoration Projects										
9	Dogfish (WF Dogfish) Creek 15.0285, SF Dogfish (Wilderness, Harding) 15.0285A, Liberty Bay	Restoration	Replace culvert at Lindvig Avenue with bridge or culvert sufficient to pass sediments and restore tidal influence upstream of the culvert; remove rock weir upstream of Lindvig Way culvert. Approximately 7 acres.						Completed in 2003. SRFB Grant	

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17	Barker Creek 15.0255 and Hoot Creek 15.0255A	Restoration	Replace the culvert at the Tracyton Boulevard crossing with a bridge of sufficient length to restore natural estuarine function upstream, to ensure unobstructed fish passage, and to restore natural sediment transport. Approximately 2 acres.						34' concrete bottomless culvert scheduled for Summer 2004 (SRFB Grant)	
29	Annapolis boat ramp, Sinclair Inlet	Restoration	Remove boat ramp and riprap at the WDFW-owned facility at Annapolis; restore natural shoreline configuration.						Complete	

PRELIMINARY LIST OF NEARSHORE CONSERVATION AND RESTORATION AREAS
BAINBRIDGE ISLAND, WASHINGTON

Attached is a list of preliminary nearshore conservation and restoration areas and potential projects around Bainbridge Island. This list is not specifically based on the Bainbridge Island Nearshore Assessment, since that project was not complete at the time this list was produced, but it does benefit from early analysis of much of the same data used in the Nearshore Assessment and knowledge developed during the preparation of the Nearshore Assessment. This list is intended to catalog potential projects and their geographical distribution. To that end, this list is intended to be a starting place for willing property owners or groups to identify and propose projects that address priority actions and areas around Bainbridge Island. When the Bainbridge Island Nearshore Assessment is complete, this list will be replaced with a list based on the findings and results of that study.

In addition to the attached list, the following are additional general project categories:

- General marine/estuarine riparian restoration and conservation
- Education and restoration associated with docks and dock related activities, as related to habitat and water quality with particular attention to the following inlets:
    - Port Madison Bay
    - Eagle Harbor
    - Fletcher Bay
    - Manzanita Bay
- Relocation of buoys and recreational floats as related to habitat with particular attention to their location within eelgrass beds
- Removal of chemically (creosote or other) treated wood piles and drift wood that is not serving a useful purpose. Otherwise, encapsulation of treated wood piles that are serving a useful purpose.

ID	Name	Action Type	Shoreline Management Area	Description	Ownership	Criteria (Correa 2002)				
						Proximity to Priority Watershed (max 3)	Spacial Scale (max 5)	Ecological Scale (max 5)	Temporal Scale (max 3)	Total (max 16)
1	Battle Point	Conserve/Restore	Point White - Battle Point	Expand conservation easement over rest of lagoon/spit, remove fill from lagoon, replant riparian vegetation.	Private					
2	Tolo Lagoon	Conserve/Restore	Point White - Battle Point	Conserve lagoon/wetland/riparian, possibly restore wetland area to north and consolidate/remove bridges, replant riparian	Private w/ little public					
3	Fletcher Bay (lagoon), Outer	Restoration	Point White - Battle Point	Assess possibilities, including remove bulkheads, restore fringe marsh, and replant riparian in outer portion of lagoon.	Private					
4	Fletcher Bay (lagoon), Spit	Conservation	Point White - Battle Point	Conserve Spit.	Private					
5	Fletcher Bay (lagoon), Inner Area	Conservation	Point White - Battle Point	Conserve riparian vegetation, tide flats, and stream mouths. Recent Essei Creek restoration upstream from here. Minor riparian replanting.	Private w/ little public					
6	South of Fletcher Bay	Conservation	Point White - Battle Point	Conserve riparian vegetation along this area with little or no bulkhead.	Private w/ little public tidelands					

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7	South of Fletcher Bay, Close Property Area	Conservation	Point White - Battle Point	Conserve existing riparian and backshore area that is largely prestine. Public property was in conjunction with Land Trust for conservation, could be used as match.	Public w/ private					
8	Crystal Springs, Groin Field	Restoration	Point White - Battle Point	Remove groin field intercepting sediment drift. Two additional groins to north.	Private					
9	Lange Groin	Restoration	Point White - Battle Point	Removal of groin that significantly intercepts sediment drift	Private w/ public ROW immediately adjacent					
10	Schel-Chelb Wing Walls	Restoration	Rich Passage	Removal/redesign of Schel-chelb culvert wing wall to eliminate drift intercept and down-drift erosion.	Public & Private					
11	Pleasant Beach, Groin/Ramp Field, Southeast	Restoration	Rich Passage	Remove series of groins and ramps intercept sediment drift	Private					
12	Pleasant Beach, Groin/Ramp field, Northwest	Restoration	Rich Passage	Remove series of groins and ramps intercept sediment drift	Private					
13	Bean's Bight, Groin Field	Restoration	Rich Passage	Remove groin field intercepting sediment drift	Private					

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14	Blakely Groin Field, South Shore	Restoration	Blakely Harbor	Remove groin field intercepting sediment drift	Private					
15	Blakely Riparian, Inner Harbor	Conserve/Restore	Blakely Harbor	Conserve and restore riparian vegetation. Park is conservancy type with passive and interpretive uses.	Private & Public					
16	Country Club Road	Restoration	Blakely Harbor	Relocate encroaching road and bulkhead, restore riparian	Public ROW with undeveloped private tideland and u					
17	Blakely, Log Pond Jetties	Restoration	Blakely Harbor	Remove log pond jetties and possibly concrete power house structure.	Public w/ private potentially effected by project					
18	Wiskey Creek subestuary	Conserve/Restore	Eagle Harbor	Conserve existing riparian, restore riparian, restore fringe marsh, remove bulheads and retained fill.	Private w/ public ROW					

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19	Head-of-Bay	Conserve/Restore	Eagle Harbor	Conserve and restore fringe marsh and riparian vegetation. Remove fill and piles. Assess the possibility of relocating Eagle Harbor Drive and bulkhead landward, and removing auto shop and bulkhead at mouth of Cooper Creek. Remove log/debris raft.	Private w/ little public (including ROW)					
20	South Winslow Inlet	Conservation	Eagle Harbor	Conserve riparian vegetation.	Private					
21	Waterfront Park/Ravine Creek	Conserve/Restore	Eagle Harbor	Remove bulkhead and restore riparian vegetation along waterfront park. Conserve riprian vegeation in Ravine Creek subestuary. Investigate riparian restoration at WSF Maintenance facility.	Public w/ little private					
22	Wing Point Lagoon	Conserve/Restore	Eagle Harbor	Restore historic extent of lagoon. Restore backshore and riparian vegetation.	Private w/ little public					
23	Yeomalt Point	Conserve/Restore	Murden Cove	Conserve backshore and riparian vegetation. Remove/ reduce severely encroaching bulkhead at Yeomalt Point.	Private w/ little public					

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24	Murden Cove Subestuary	Conservation	Murden Cove	Mouth to one of best salmon streams on Island. Conserve riparian, backshore, wetland, and spit areas. Spit and associated marsh is already under conservation easement and Open Space tax status.	Private w/little public					
25	Manitou Beach Marsh	Conserve/Restore	Murden Cove	Improve tidal connection and restore tidal marsh.	Public & Private. City recently purchased.					
26	Manitou Beach Drive	Restoration	Murden Cove	Assess relocating/reducing road and remove bulkhead. Restore backshore and riparian areas.	Public ROW with mostly private tidelands and uplan					
27	Murden Cove/Skiff Point Feeder Bluff	Conserve/Restore	Murden Cove	Conserve non-bulkheaded feeder bluff and restore other feeder bluff areas by removing bulkheads.	Private					
28	Rolling Bay Riparian	Conservation	Rolling Bay - Point Monroe	Conserve existing riparian vegetation and feeder bluff activity.	Private					

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29	Dripping Water Creek Mouth	Restoration	Rolling Bay - Point Monroe	Remove groin/bulkhead that is intercepting significant amound of sediments.	Private					
30	Fay Bainbridge Area, Backshore	Conserve/Restore	Rolling Bay - Point Monroe	Conserve remaining backshore and wetland areas. Restore backshore and wetland areas. Boardwalks through backshore at state park.	Private w/ public park					
31	Point Monroe, Spit	Conserve/Restore	Rolling Bay - Point Monroe	Assess what conservtion/restoration opportunities exist. The updrift portion of the spit has been almost completely modified with armoring, fill, and building that intrudes into the intertidal. Very little backshore area remains. Down drift portion of spit remains largely unarmored with backshore and salt marsh.	Private w/ little public					
32	Point Monroe Lagoon, South Shore	Conservation	Rolling Bay - Point Monroe	Conserve mostly natural riparian area.	Private					

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33	Port Madison Bay, Marsh/Fill & Herring	Conserve/Restore	Port Madison Bay	Assess what conservtion/restoration opportunities exist. Port Madison historically has contained significant fringe marsh, some of which retmains today. Most has been filled behind bulkhead construction. WDFW has documented nearly consistent 100% hearing egg mortality and the cause of this needs to be determined	Private w/ little public					
34	Bloedel Bulkhead	Restoration	Port Madison Bay	Remove intruding bulkhead on a documented forage fish spawning beach. Upland is covered with well established young forest regrowth.	Private Reserve					
35	Seabold Bluff	Conservation	Agate Passage	Conserve existing healthy riparian area and feeder bluff activity along shoreline almost completely unarmored.	Private w/ large Land Trust owned tidelands and li					
36	Little Manzanita Bay	Conserve/Restore	Manzanita Bay	Conserve existing intact riparian area, restore riparian, relocate Manzanita Road, evaluate small lagoon potential.	Private, little public					

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37	Big Manzanita, End	Conserve/Restore	Manzanita Bay	Conserve existing riparian and stream mouth subestuary. Restore riparian and remove bulkhead to restore fringe marsh areas.	Private w/ little public					
38	Manzanita, Intruding Bulkheads	Restoration	Manzanita Bay	Remove significantly intruding bulkheads and restore intertidal, backshore, riparian.	Private					
39	Fairy Dell Park	Conserve/Restore	Point White - Battle Point	Conserve remaining riparian and restore riparian. Remove bulkhead.	Private w/ little public					
40	Yaquina Feeder Bluff	Conservation	Murden Cove	Conserve natural feeder bluff activity.	Private w/ little public					
41	Torvanger Feeder Bluff	Restoration	Rolling Bay - Point Monroe	Remove bulkheads and restore feeder bluff activity.	Private w/ little public tidelands					
42	Bloedel Feeder Bluff	Conservation	Port Madison Bay	Conserve feeder bluff activity.	Private w/ adjacent public park					
43	Tolo Feeder Bluff	Conserve/Restore	Point White - Battle Point	Remove bulkheads and restore feeder bluff activity.	Private w/ little public					
44	Venice Beach Feeder Bluff	Conserve/Restore	Point White - Battle Point	Restore and conserve feeder bluff activity.	Private w/ little public					

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45	Crystal Springs Road	Restoration	Point White - Battle Point	Relocate road and remove bulkhead to restore intertidal, backshore, and riparian area.	Public ROW w/ largely private tidelands and upland					
46	Point White Drive	Restoration	Rich Passage	Assess road relocation/reduction to restore & protect backshore and marsh.	Public w/ significant private tideland and uplands					
47	Pleasant Beach Backshore	Conserve/Restore	Rich Passage	Conserve and restore extensive backshore/wetland area.	Private w/ little public					
48	Yeomalt Feeder Bluff	Conservation	Murden Cove	Conserve existing feeder bluff activity and riparian area.	Private w/ little public					

APPENDIX C

PROCESS GUIDE

East Kitsap Lead Entity Evaluation and Prioritization of SRFB Project Proposals and Timeline for the 5th SRFB Grant Round

Attachment 1: Pre-application Questionnaire
Attachment 2: Criteria for Evaluation of Project Proposals.
Attachment 3: Presentation Feedback Forms
Attachment 4: Initial Citizen Rating Form
Attachment 5: Initial TAG Rating Form
Attachment 6: Final Project Evaluation Form

APPENDIX C

PROCESS GUIDE
East Kitsap Lead Entity Evaluation and Prioritization of SRFB Project Proposals and Timeline for the 5th SRFB Grant Round

Purpose: Funding for a project is awarded on a competitive basis by the state Salmon Recovery Funding Board (SRFB). Kitsap County is the Lead Entity (LE) East Kitsap for the portion of Kitsap Peninsula that drains into the Puget Sound, including portions of Kitsap, Pierce and Mason counties and several nearby islands, including Bainbridge Island, Fox Island, and Anderson Island. Project proposals are submitted by applicants to the lead entity, which evaluates the proposals, ranks them according to a local salmon recovery strategy and selects a package of proposals to submit to the SRFB for funding consideration.

At the Lead Entity level, state law requires that the projects be evaluated and ranked by a committee of citizens with the assistance of a technical advisory group (TAG). The TAG evaluates projects based on their technical merits with an emphasis on the project's benefits to salmon and certainty of success. The citizen's committee works with the TAG and determines the final ranking of projects based on their technical merits as well as how well the project fits within the local salmon recovery strategy, public involvement and cost appropriateness. The lead entity then puts the proposals together and submits them as one strategic package accompanied by a lead entity application that describes how the package addresses the local salmon recovery strategy.

To help ensure that every project submitted to the SRFB is technically sound, the local Kitsap TAG and citizen committees, with assistance from the SRFB technical advisors will identify projects they believe have low benefit to salmon, a low likelihood of being successful, and/or have costs that outweigh the anticipated benefits of the projects. The TAG and citizens committee will make every effort to work with project sponsors and give the applicants an early opportunity (pre-applications, presentation feedback and field visits) to improve the proposal before the final application is due for local evaluation. If the TAG and citizens committee determine that the final application is not technically sound, the citizens committee will not move the application forward to the SRFB, but will provide project applicants with recommendations for other funding sources, if appropriate.

Process Steps for 5th SRFB Round (All meetings are open to the public)

All applicants must submit their applications through the East Kitsap Lead Entity. Starting this year all applicants will submit and modify their grant applications on-line through PRISM (Grant Management Tool). SRFB staff and the local LE

Coordinator will provide guidance for PRISM use. The SRFB will release DRAFT SRFB policy manual & application forms on February 2, 2004 and FINAL SRFB policy manual & application forms on February 27, 2004. Please refer to the following steps for instructions, due dates, workshops and required materials for the East Kitsap Lead Entity local process. The final project list from each lead entity is due to the SRFB by July 16, 2004 and the SRFB will decide on final funding in December 2004.

If you have any questions please contact the local LE Coordinator, Monica Daniels at (360) 337-4679 or mdaniels@co.kitsap.wa.us.

Thanks!

2004 SRFB 5th Round Grant – East Kitsap LE Timeline

Please refer to the following pages for the description of steps 1-10. I will post the times and locations as soon as they are confirmed.

March 3	**Application Workshop (Step 1)** 10am –12pm, Givens Community Center, Kendall Room, Port Orchard
March 24	**Pre-application Due to local LE Coordinator (Step 2)**
April 1-2	**Presentations (Step 3)** Two days if necessary from 10 am – 3 pm
April 14-15	**Field Trips to sites (Step 4)** Two days if necessary.
May 5	**Final SRFB Applications due (Step 5)**
May 21	**Citizens committee and TAG initial ratings due to LE Coordinator (Step 6)**
May 27	**"Tool for Discussion" Workshop (Step 7)**
June 4	**Citizens Committee Final Ranking Due (Step 8, if necessary)**
June 22	**Adopt Final Prioritized List Meeting (Step 9)**
July 9	**LE Application Packet sent to SRFB (Step 10)**

Step 1 - Application Workshop - Kickoff for the Salmon Recovery Funding Board 5th round grant cycle. The LE Coordinator for East Kitsap and possibly SRFB staff will provide applications, timelines for state and local processes, identify sources for technical assistance and will have a question and answer session. The intended audiences are potential project applicants, citizens committee and TAG members. The SRFB will have another workshop at a later date to go over using PRISM to enter applications.

WORKSHOP DATE: March 3, 2004

Step 2 - Project applicants will provide a short description of their project along with answering the pre-application questionnaire that addresses how the proposed project fits within the East Kitsap Peninsula Salmon Recovery Strategy (See Attachment 1, Pre-application). Pre-applications will be submitted to the LE Coordinator and distributed to citizens committee and TAG members. Applicants must submit a pre-application by the due date to be considered for the 5th Round SRFB Grant. Pre-applications can be mailed, dropped off or sent electronically to:

Monica J. Daniels, LE Coordinator
Kitsap County Department of Community Development
614 Division Street MS 36: Port Orchard, WA 98366
mdaniels@co.kitsap.wa.us
(360) 337-4679

March 24, 2004 Pre-application DUE DATE

Step 3 - Proposed Project Presentation Workshop (pre-applications). Project applicants will give a presentation to the citizens committee and TAG members on their proposed project. A time limit for each presentation will be announced and will depend on how many applications are submitted to the LE. Feedback forms (See Attachment 3) will be provided to the citizens committee and TAG members to provide constructive comments. The LE will provide the applicants feedback after the LE has made a consensus opinion on how the project could be improved. If the project is low benefit/low certainty, the applicant will be informed at this time.

The forms will include preliminary high, medium or low scores on the evaluation factors. The goal of the workshop is to educate the Citizens and TAG members and to provide the project applicants with

constructive, verbal and written pre-application evaluations. Examples of feedback could be:

Example 1: Improve educational component by involving nearby school in restoration plantings. (Not: poor educational involvement)
Example 2: Improve Certainty of Success by providing a detailed "user friendly" restoration plan. (Not: Low certainty of success)

April 1-2, 2004 Presentation Workshop DATES (April 2 will be used only if needed. We will try to have all presentations on April 1 but it depends on how many applications are received.)

Step 4 - Field trips to all proposed application sites. A time limit for each field trip presentation will be announced and will depend on how many applications are submitted to the LE. The citizens committee and TAG members (& possibly SRFB staff, &/or review members) will go to each site together to learn about the projects and greatly improve their ability to evaluate and rate proposed projects. It is also an opportunity for the project applicants to highlight their project and highlight changes they have made in regards to the feedback from the presentation workshop.

April 14-15, 2004 Field Trips to proposed project restoration sites. (Number of days needed depends on the number of restoration projects)

Step 5 - Final SRFB applications (including the pre-application supplemental questionnaire, attachment 1) due to the Lead Entity Coordinator. LE Coordinator will distribute application copies to citizens committee and TAG members. The project applicant must enter applications into PRISM. We will download the application on May 6, 2004 to distribute to the committees.

May 5, 2004 FINAL SRFB APPLICATION DUE DATE

Step 6 - Initial citizen committee and TAG member ratings of projects (see attachments 4 & 5). The ratings will be used to educate each other on all merits to better evaluate and rate the projects.

Citizens will rate high, medium or low for the following factors:

- Consistency with the East Kitsap Peninsula Salmon Recovery Strategy
- Education, Outreach and Partnerships

- Cost of Project

TAG will rate high, medium or low for the following factors:

- Benefits to Salmon from Project
- Certainty of Success of Project
- Cost Appropriateness of Project

The outcome of this initial rating will be a "Tool for Discussion" presentation which the LE Coordinator will pull together for the "Tool for Discussion" workshop in Step 7. Each of the six factors will be averaged for each proposed project and put in a graphic to promote discussion.

May 21, 2004 Initial ratings due to LE Coordinator

Step 7 - " Tool For Discussion" cooperative workshop to gain perspective of proposed project merits. The goal is to educate each other and come to a consensus on the various merits of each project. The outcome will be a full discussion of each project (holistic approach), to point out or differentiate the nuances of projects with similar ratings. For example, if Project 1 and Project 2 both have high ratings for Benefits to Salmon, then the TAG should differentiate the benefits in order to more accurately prioritize and rate the benefits to salmon . Another example would be if several projects have high ratings in Community Outreach, the citizens committee should differentiate the merits at this meeting). For the record, the TAG will recommend a ranked list of projects based on the technical merits of benefits to salmon and certainty of success.

After both the citizens committee and TAG have discussed all the projects, both groups will come together to produce a final ranked list, to be adopted by consensus by the citizen committee, which will then be released to the public for comment. If the citizen committee does not come to consensus on a final list, then the citizens committee will go to Step 8 and individually rank the list using all five ranking factors. The LE Coordinator will summarize the outcome of this workshop and produce a report. **Citizens committee attendance is mandatory for committee members to rank the final list.**

May 27, 2004 "TOOL FOR DISCUSSION" Workshop Date.

Step 8 - If a final ranked list is not produced from Step 7 then the citizens' committee members will take home the meeting summary and TAG

recommended list and individually rank projects using all five ranking factors: (See Attachment 6)

1. Benefit to Salmon from Project (40%)
2. Certainty of Success of Project (30%)
3. Consistency with the East Kitsap Peninsula Salmon Recovery Strategy (15%)
4. Education, Outreach and Partnership (10%)
5. Cost Appropriateness of Project (5%)

The LE Coordinator will summarize the rankings and develop a DRAFT prioritized project list. The list and summary comments will then be distributed to the citizens committee and TAG members along with the applicants and public for a comment period.

June 4, 2004 Citizens' Committee FINAL RANKINGS DUE to LE Coordinator.

Step 9 - At least one week after the draft prioritized list has been distributed to the committees, project sponsors and public there will be a Final Prioritization meeting. There will be a public comment period (3 minutes/person testimony or written comments accepted). After the public comment period is closed, the Citizens committee will further discuss the draft prioritization list. After discussion of the list, the Citizens committee will adopt a "Final Prioritized List" by consensus. (If consensus is not successful, then a majority vote will occur).

June 22, 2004 Final Prioritization Meeting to adopt a final prioritized list of projects.

Step 10 The LE Coordinator will take the final prioritized list of projects and prepare the application packet to forward to the SRFB. The packet will include the East Kitsap Salmon Strategy and summary, the prioritized list of projects and the ranking criteria. LE Coordinator needs to have the packet finished by July 9, 2004.

July 16, 2004 Lead Entity Packet due to SRFB

The SRFB will then have a review period, which will include Lead Entity presentations, reports and public comment period. The SRFB will allocate funding at an open public meeting December 2-3, 2004.

Attachment 1: Pre-application Questionnaire

Projects will be rated based on your SRFB application and to the following pre-application questions that address how your project fits within the East Kitsap Peninsula Salmon Recovery Strategy. Please limit your response to no more than a total of three (3) typed pages, plus any maps, pictures or graphics needed. The Lead Entity will assist you with references and technical assistance as needed.

1. Applicant name, organization and contact information.

2. Summary of funding request. Please include total project cost, sponsor match contribution and grant request.

3. Please provide a short description of your project. Identify the specific problems that will be addressed and why it is important to do this at this time. Describe how and to what extent (e.g. percent change, acres, miles, etc.) the project will protect, restore or address salmon habitat. Describe the general location, geographic scope and targeted species.

4. Does your project address a limiting factor for salmon that has been identified in the Salmonid Habitat Limiting Factors – WRIA 15 East Report the Bainbridge Island Nearshore Assessment, or the Key Peninsula Nearshore Assessment (Contact LE Coordinator for a copy of these reports)? If so, where does it rank in the list of Action Recommendations for your watershed? If your project is not specifically recommended in this report, explain what limiting factor(s) this project addresses and how this project would be likely to rank with other Action Recommendations for your watershed.

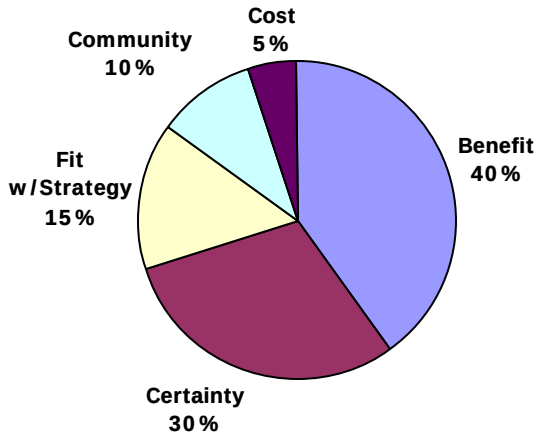
5. Is your project in a salmonid refugia identified in the Kitsap Peninsula Salmonid Refugia Study (Contact LE for a copy of the study)? If so, in what type of refugia does it occur, in which category is it and what is the overall refugia score?

6. Geographic locations have been prioritized into tiers within the East Kitsap Peninsula Salmon Recovery Strategy (See Table 1 of the strategy). In which tier does your project occur?

7. Projects that increase education, outreach and improve coordination among the community lead to stronger protection and recovery of salmon. How does your project incorporate education, outreach and improve partnerships? Please be specific (examples can be found in the East Kitsap Peninsula Salmon Recovery Strategy).

Attachment 2: Explanation of Criteria for evaluation project proposals

1. Benefits to Salmon from Project



High Benefit: High benefit would go to projects addressing multiple salmonid species (4 species or greater), large salmon runs, unique populations of salmonids essential to recovery, or stocks listed under the Endangered Species Act (ESA) or non-listed populations primarily supported by natural spawning. The proposed project addresses a critical life history stage or habitat type or addresses multiple life history requirements. Additionally, the project should address a key habitat condition or watershed process that significantly protects or limits the productivity of the salmonid species in the area and has been identified through a documented habitat assessment. For acquisitions a high benefit would include projects with a majority of the habitat is intact (greater than 60%), or if less, is a combination restoration/acquisition project. The project is located in a high priority geographic area (Tier 1 or Tier 2). Nearshore projects are a Tier 1 in East Kitsap and support multiple species and life histories for salmon throughout Puget Sound (Appendix C further prioritizes nearshore actions). For proposed assessments, a high benefit rating can be received if the assessment addresses an information need that is crucial to understanding the watershed structure and dynamics, is directly relevant to project development or sequencing, and will clearly lead to projects of high benefit.

Medium Benefit: Medium benefit would go to projects addressing a moderate number of species (2 to 3 salmonid species) or unique populations of salmonids essential for recovery, medium size runs or ESA or non-listed species populations primarily supported by natural spawning. The project may not address the most important limiting factor or access to habitat is restricted but will improve habitat conditions. The project is located in a high priority geographic area (Tier 3 or Tier 4). For acquisitions a medium benefit would include projects where 40-60% of the total project area is intact habitat, or if less the project must be a combination that includes restoration.

Low Benefit: Low benefit would go to projects that address a single species and/or fish use may not have been documented. In addition, the proposal has

not been proven to address an important habitat condition in the area, addresses a lower priority geographic area (Tier 5 streams) and has not been documented in a habitat assessment. If the acquisition project area is less than 40% intact the project is a low beneficial project.

2. Certainty of Success of Project: The level of certainty that the project would produce its intended benefits for fish

High Certainty: High certainty would go to a project that has an approach that is appropriate to meet the project objectives; uses well-tested techniques; a completed comprehensive assessment; and the project is consistent with a scientifically based habitat protection and restoration strategy. The project will be viewed as having high certainty if it has a solid understanding of conditions and watershed processes that cause or contribute to the problem being addressed versus just replace a missing structural element and is in the correct sequence. Projects that compliment other protection/restoration actions can receive high scores of certainty. Landowners are willing to have the work done.

A high certainty of success should be considered for projects that have the potential for the project sponsor to complete the project (this includes having a design or scope of work completed, whether necessary partnerships/property access are established and the sponsor has experience to design, plan, implement and monitor a project or have indicated how they would acquire needed experience).

Medium Certainty: A Medium certainty project is moderately appropriate to meet the project objectives; uses scientific methods that may have been tested but the results are incomplete; is dependent on other actions being taken first that are outside the scope of this project. The landowners have been contacted and are likely to allow work to be done but have not conclusively agreed at the time of the application. The project has few or no known constraints to successful implementation.

Low Certainty: A Low certainty project is unclear on how the goals and objectives will be met; uses methods that have not been tested or proven to be effective in past uses; may be in the wrong sequence with other protection and restoration actions; addresses a low potential threat to salmonid habitat. A low certainty score will go to projects where the landowner willingness is unknown or the landowner is currently unwilling. Low certainty will go to actions that are unscheduled, matching funds are not secured and has several constraints to successful implementation.

3. Consistency with the East Kitsap Peninsula Salmon Recovery Strategy

The following factors will be considered to determine how consistent a project is with the regional goals and priorities set out within the East Kitsap Peninsula Salmon Recovery Strategy. The site-specific merits of a project are considered in the other four evaluation criteria.

- ✓ **Benefit to Salmon –** See number 1 above.
- ✓ **Geographic Location** - Projects that are located in a high priority area based on the East Kitsap Peninsula Salmon Recovery Strategy will receive the highest priority for this factor (See Geographic locations in Appendix B).
- ✓ **Education, Outreach and Partnerships**
- ✓ **Project Type Priorities** - Since restoring degraded habitat is a relatively long and expensive process, projects that make preservation of existing high quality habitat and restoring access to blocked high quality habitat are a high priority. However, when prioritizing projects, the relative impact of the project on salmon will be foremost in consideration.
- ✓ **Priorities within Watersheds** - Projects should address the most important limiting factors that have been prioritized in the report, Salmonid Habitat Limiting Factors in WRIA 15 (Haring 2000).
- ✓ **Monitoring** - Monitoring plan is included and fully described in the project proposal.

4. Education, Outreach and Partnership

Projects that encourage building community support and partnerships will be of the highest benefit to salmon. Projects that are designed and implemented in a manner that include the following outreach components (not inclusive) will receive a higher rating. Proposals must include a detailed description of community support and participation of the public or partnerships. If the project is located in an area that is inaccessible to the public the proposal should include how they intend to get the public involved whether it be the use of volunteers, news media, strong partnerships, etc.

- High level of community support
- Educational component
- Contribution of volunteers
- Public access
- Involvement of established citizen group stewards
- Cultural significance by Native American Tribes
- Encourages different partnerships

5. Cost Appropriateness of Project

The highest benefit will be projects that are cost-effective, well designed and demonstrate the project cost is appropriate for the benefits gained. The project

must be appropriate for SRFB funding according to their policies. A higher ranking could include a project that brings in a larger match from other sources or makes more funds available for salmon recovery.

A medium score for cost appropriateness of the project would be for a project that has a reasonable cost relative to the predicted benefits for the project type in that location.

A low score for cost appropriateness of the project would be for a project that has a high cost relative to the predicted benefits for that particular project type in that location.

Attachment 3: Pre-Application Project Presentation Workshop Feedback Form

Citizens committee and TAG members will provide feedback to the applicants on their pre-applications and presentations. The constructive comments and pre-application evaluations will include preliminary high, medium or low scores. This will not be the final evaluation and applicants will have the opportunity to incorporate recommendations provided at this workshop into their final application. The LE Coordinator will summarize the comments with the citizens and TAG committees and forward them to the applicants as soon as possible.

Project Name and Applicant:_____

1. Benefits to Salmon from Project (High, Med, Low)

2. Certainty of Success of Project (High, Med, Low)

3. Consistency with East Kitsap Peninsula Salmon Recovery Strategy (High, Med, Low)

4. Education, Outreach & Partnerships component (High, Med, Low)

Any additional comments: (costs, general, informational need):

Attachment 4: Initial Citizen ratings of final applications

Results of the following initial ratings will be used to develop a "Tool for Discussion" to be used at the workshop on May 27, 2004. Please provide a rating of high, medium, low for the following factors and provide comments.

Evaluators Name:_____

Project Name and applicant: _____

Rate the following high, medium or low and **provide comments** for the following factors:

1. Consistency with East Kitsap Peninsula Salmon Recovery Strategy (High, Medium, Low):

2. Education, Outreach, Partnerships (High, Medium, Low):

3. Cost Appropriateness of Project (High, Medium, Low):

Attachment 5: Initial TAG ratings of final applications

Results of the following initial ratings will be used to develop a "Tool for Discussion" to be used at the workshop on May 27, 2004. Please provide a high, medium, low for the following factors and provide comments.

Evaluators Name:_____

Project Name and applicant: _____

Rate the following High, Medium or Low and **provide comments** for the following factors:

1. Benefits to salmon from Project (High, Medium, Low):

2. Certainty of Success of Project (High, Medium, Low):

3. Cost Appropriateness of Project (High, Medium, Low):

Attachment 6: Final Project Evaluation Form

Results will be summarized and a DRAFT prioritized list will be distributed for public review and comment. The citizens' committee will meet on June 22, 2004 to hear public comments, review and discuss the list and come to consensus on adopting a "Final Prioritized List".

Evaluator Name:_____

Project Name and Applicant Name: _____

Using the results from the "Tool for Discussion" Workshop and the final applications rate the following factors.

1. Benefit to Salmon from Project (0-40 points): _____
   Comments:

2. Certainty of Success of Project (0-30 points):_____
   Comments:

3. Consistency with the East Kitsap Peninsula Salmon Recovery Strategy (0-15 points): _____
   Comments:

4. Education, Outreach and Partnerships (0-10 points): _____
   Comments:

5. Cost Appropriateness of Project (0-5 points): _____
   Comments:

Kitsap County Natural Resources Program
614 Division Street MS-4
Port Orchard ,WA 98366

East Kitsap Salmon Habitat Restoration Committee

Committee Policies

Bylaws & Ground Rules

The mission of the East Kitsap Salmon Habitat Restoration Committee is to ensure local salmon habitat is preserved and restored for current and future generations.

1. Bylaws

1.0 Name
The name of this group shall be the "East Kitsap Salmon Habitat Restoration Committee."

1.1 Geographic area of concern
Those portions of the Kitsap peninsula that drain to Puget Sound and Bainbridge Island.

1.2 Purpose
The purpose of the Committee is to fulfill the requirements of the citizen's committee pursuant to RCW 75.46 (HB2496 Salmon Habitat Recovery Funding Act). Specifically, this includes establishing and prioritizing projects on the East Kitsap Lead Entity Habitat Project List.

1.3 Nature of the organization
The Committee shall function as an advisory committee to the Kitsap County Board of Commissioners, staffed and administered by the Natural Resources program.

1.4 Duration
The Committee shall continue it work until dissolved by the Board of Commissioners.

1.5 Membership
The Committee shall consist of between 7 and 15 members appointed by the Board of Commissioners. Members shall normally be appointed to serve a term of three years. To establish a rotation, at first members shall be appointed to 1-, 2-, and 3-year terms. The Committee shall submit names of nominee(s) to the Board of Commissioners when a vacancy occurs. *Ex officio* members may serve at the Committee's discretion.

1.6 Meetings
Meetings shall be open to the public and advertised to the extent practicable. Meeting frequency, time, and location shall be at the discretion of the Committee.

1.7 Absentee Policy
A member who misses three consecutive meetings or four meetings in a 12-month period will forfeit his/her position on the Committee. The Committee may re-instate such members one time.

1.8 Quorum & passing vote
A quorum shall consist of 50% of filled seats. A quorum is required for voting on the prioritization of the Habitat Project List. A vote will be considered passing if a simple majority of those present vote affirmatively.

1.9 Ground rules
The Committee shall operate with written ground rules that specify its mission and operating procedures. The Ground rules may be amended by a majority vote.

1.10 Bylaws
The Committee may not alter these Bylaws.

2. Ground Rules: Mission

The mission of the East Kitsap Salmon Habitat Restoration Committee is to ensure salmon habitat is preserved and restored for current and future generations.

2.1 Habitat Preservation

Preserving existing high-quality salmon habitat is the Committee's the highest priority.

2.1.1 Preservation key habitat via outright purchase by a government entity or non-profit land trust shall be the highest priority.

2.1.2 Widespread preservation of important areas via public education & involvement activities shall be the next highest priority within this category.

2.1.3 Preservation of key habitat via conservation easements is the next priority within this category.

2.2 Habitat Restoration

Restoring degraded salmon habitat is the Committee's second priority.

2.2.1 Restoration of key habitat via publicly-funded restoration projects shall be the highest priority within this category.

2.2.2 Widespread restoration of important areas via public education & involvement activities shall be the next highest priority within this category.

2.2.3 Restoration of key habitat via privately-funded restoration projects shall be the next priority within this category.

2.3 Public Support

Facilitating widespread support for salmon habitat preservation and restoration activities among taxpayers, landowners, civic groups, and businesses is the Committee's third priority.

2.3.1 Within this category, the highest priority is to create general public awareness that public funds are being spent effectively and strategically.

2.3.2 The second highest priority within this category is to create a demand for pubic and private habitat preservation and restoration assistance from owners of key habitat.

2.3.3 The third highest priority within this category is to create a demand among civic groups and businesses to be involved with preservation and restoration efforts.

3. Ground Rules: Committee Operating Procedures

3.1 Committee's philosophy

3.1.1 The Committee will operate with an emphasis on (1) proactivity rather than reactivity, (2) strategic leadership more than administrative detail, (3) the future rather than the past or present, (4) encouragement of diversity in viewpoints, and (5) collective rather than individual decisions.

3.2 Chair's role

3.2.1 The Chair's role is to assure the integrity and fulfillment of the Committee's process (presiding over meetings, ensuring these policies are followed, etc.). He/she may also represent the Committee to outside parties. He/she does not have the authority to act on behalf of the Committee unless such authority is specifically delegated for a specific task.

3.2.2 The Committee will select a Chair to serve for a one-year term. There is no limit on the number of times a member can be elected as Chair.

3.3 Member Code of Conduct

3.3.1 Members must represent unconflicted loyalty to the interests of the citizens of East Kitsap. This accountability supersedes any conflicting loyalty such as that to advocacy or interest groups and membership on other boards or staffs. It also supersedes the personal interest of any board member acting as a consumer of the organization's services.

3.3.2 Members must to the extent possible, avoid conflict of interest with respect to their responsibility to assemble.

3.3.2.1 There must be no self-dealing or any conduct of private business or personal services between any board member and the organization, except as procedurally controlled, to assure openness, competitive opportunity, and equal access to inside information.

3.3.2.2 When the Committee votes upon an issue about which a member has a potential conflict of interest, that member shall prior to deliberating and voting, disclose such potential conflict.

3.3.2.3 Members will annually disclose their involvement with other organizations, with vendors, or any other associations that might produce a conflict.

3.3.2.4 Members' interaction with public, press, or other entities must recognize the inability of any Committee member to speak for the Committee except to repeat explicitly stated Committee decisions.

3.3.3 Members will respect the confidentiality appropriate to issues of a sensitive nature.

3.4 Committee-Staff Linkage Policies

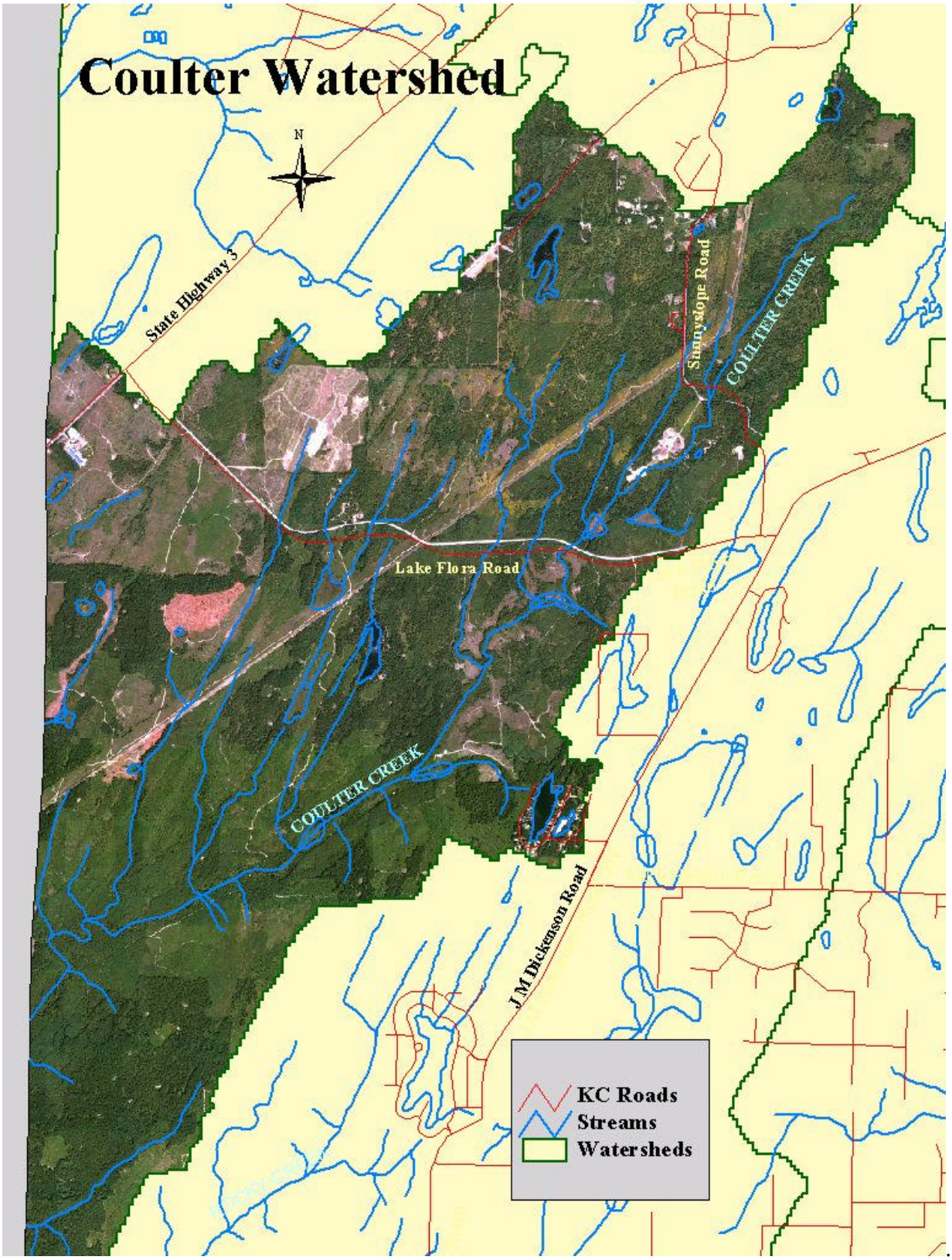
3.4.1 Only decisions of the Committee acting as a body are binding on the Staff.

lsbo) at ex-officio members.

Appendix E

Summary of High Priority Watershed Salmonid Habitat Limiting Factors

Water Resource Inventory Area 15 (East)
Washington State Conservation Commission
Donald Haring – November 2000



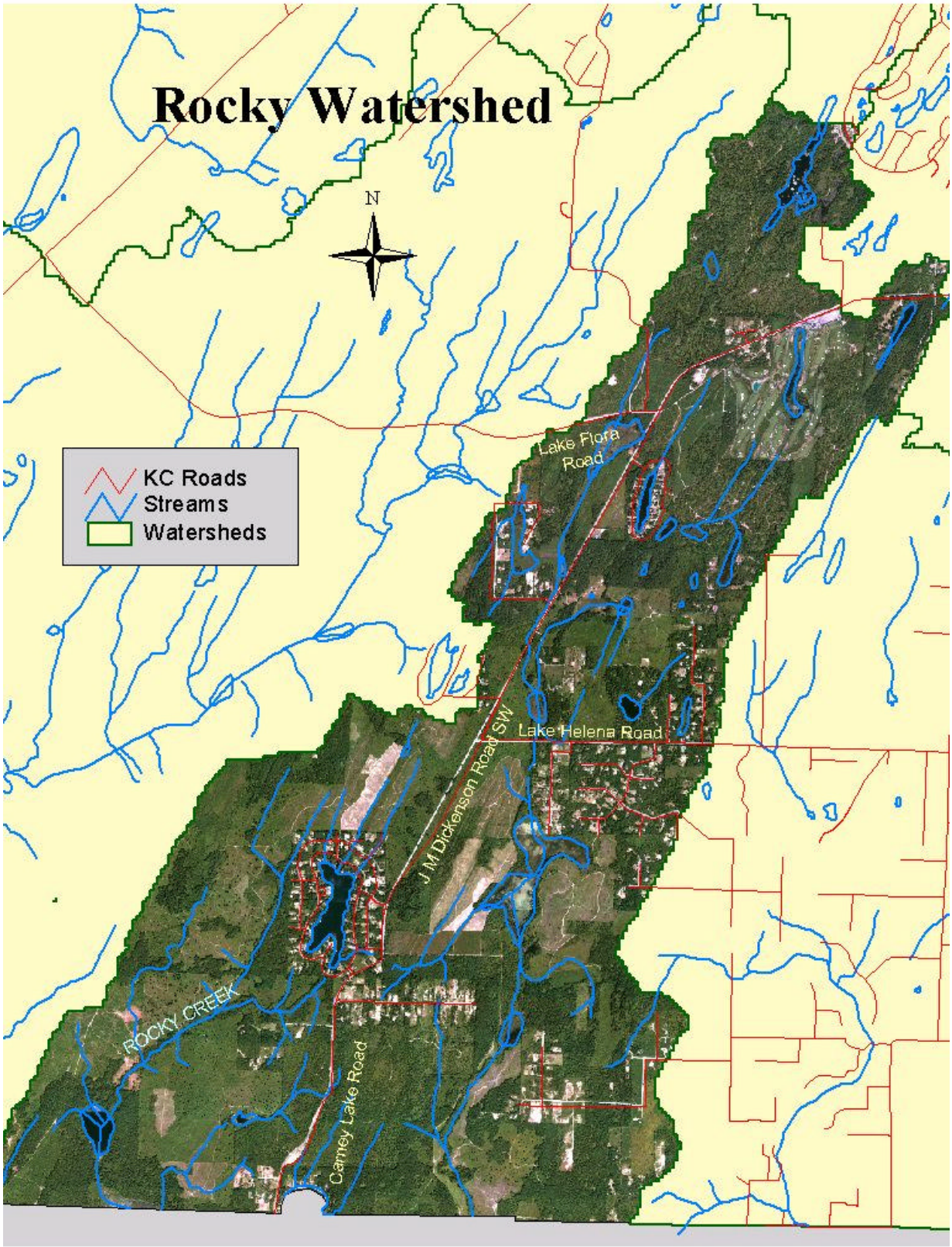
(Note: At this time we only had the GIS data to show the Kitsap County section in this picture. Will update soon.)

Coulter Creek Watershed

Salmonid Diversity: Coho, Chinook, Fall Chum, Steelhead & Cutthroat.

Action Recommendations: The following salmonid habitat restoration actions are recommended for Coulter Creek and tributaries:

- Future development in the Coulter Creek watershed should incorporate low-impact development principles and incorporate state-of-the-art stormwater BMPs to minimize potential water quantity/quality impacts
- Retain standing and down dead woody material in riparian zones for rear-term recruitment of LWD to creek channels
- Identify and correct sources of low dissolved oxygen, identified in Bremerton-Kitsap Health Department water quality sampling
- Restore functional riparian areas at the powerline/pipeline crossings of the streams in this watershed
- Assess road stability and sedimentation impacts on tributary 15.0002A, and relocate or abandon road, if warranted
- Restore natural outflow across the estuary
- Evaluate riparian condition on West Branch (15.0004) to determine if riparian restoration would be beneficial in reducing summer water temperatures
- If bank stabilization is required at the Archer property, utilize bio-engineering techniques that will maintain salmonid habitat function and diversity

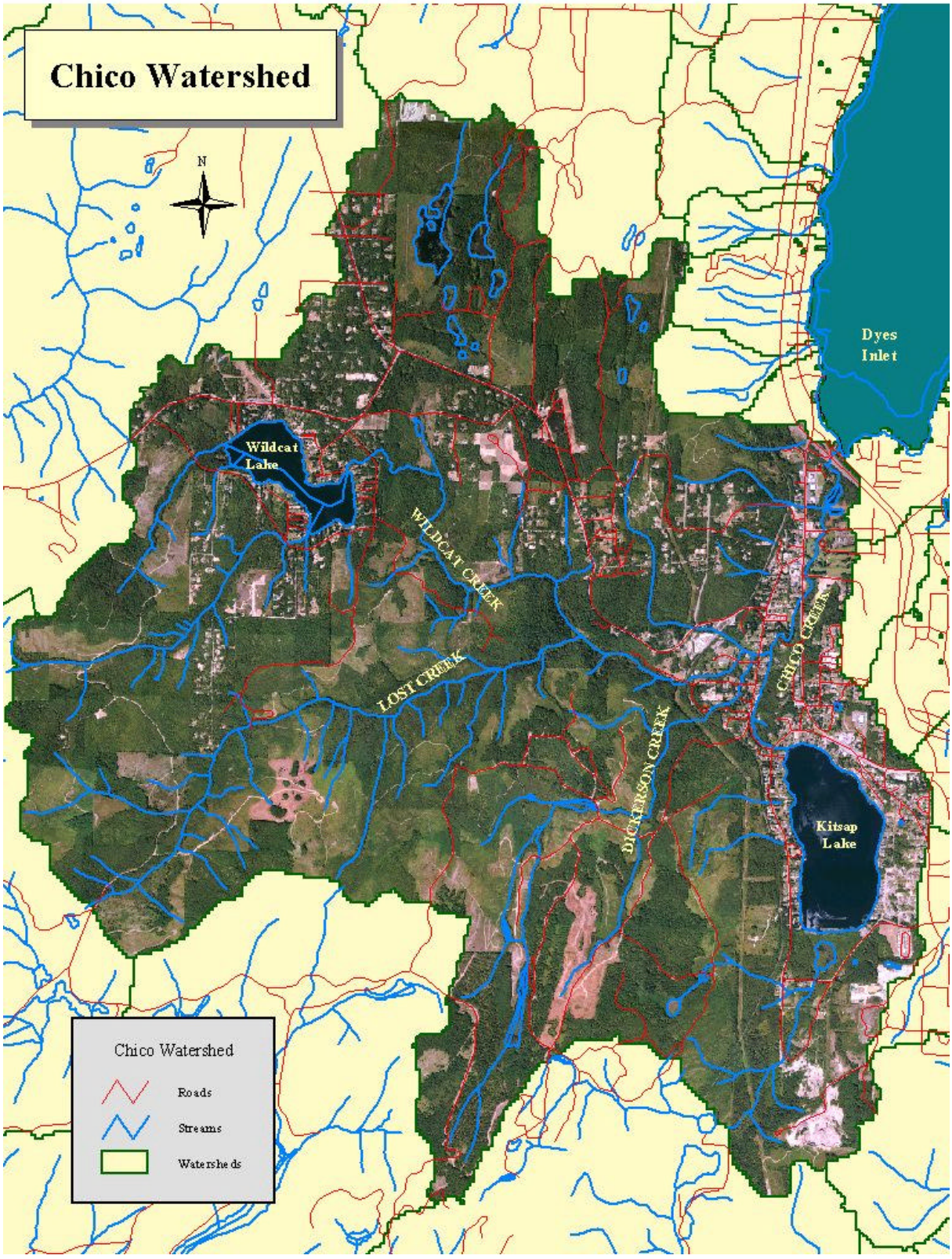

Rocky Watershed
N
KC Roads
Streams
Watersheds
Lake Flora Road
Lake Helena Road
J M Dickenson Road SW
ROCKY CREEK
Carney Lake Road

Rocky Creek Watershed

Salmonid Diversity: Coho, Chinook, Fall Chum, Steelhead & Cutthroat.

Action Recommendations: The following ranked salmonid habitat restoration actions are recommended for Rocky Creek and tributaries:

- Protect integrity of large wetlands in headwaters of watershed
- Correct identified fish passage barriers at the 144th crossing of Rocky Creek, and at
- the 132nd KPN crossing of Winter Creek
- Prevent vehicle access at powerline access road on Fork Muck Creek at 144th KPN
- Evaluate impacts of unauthorized instream work on Winter Creek downstream of 132nd KPN, enforce and restore habitat as warranted
- Ensure that Pierce County Roads Dept. maintains roadside ditches in a manner that does not result in fine sedimentation to creeks
- Assess the cause of landslides in the lower 0.5 mile of Fork Muck Creek; implement remedial measures, as warranted
- Assess habitat conditions upstream of the sand/concrete bag dam east of the intersection of Lake Helena Drive and JM Dickenson Road, prioritize and correct barrier as warranted
- Assess channel condition (LWD presence, presence of pools, bank erosion) throughout watershed; remediate identified salmonid habitat limiting factors
- Restore full riparian function throughout watershed, with particular emphasis on agricultural areas and downstream of Wright-Bliss Road on Fork Muck Creek
- Evaluate specific areas found to not be in compliance with State water quality standards for dissolved oxygen or water temperature; identify causes of non-compliance and correct
- WDFW should actively enforce against poaching of adult salmon near the mouth of the creek, as reported by Stream Team volunteers

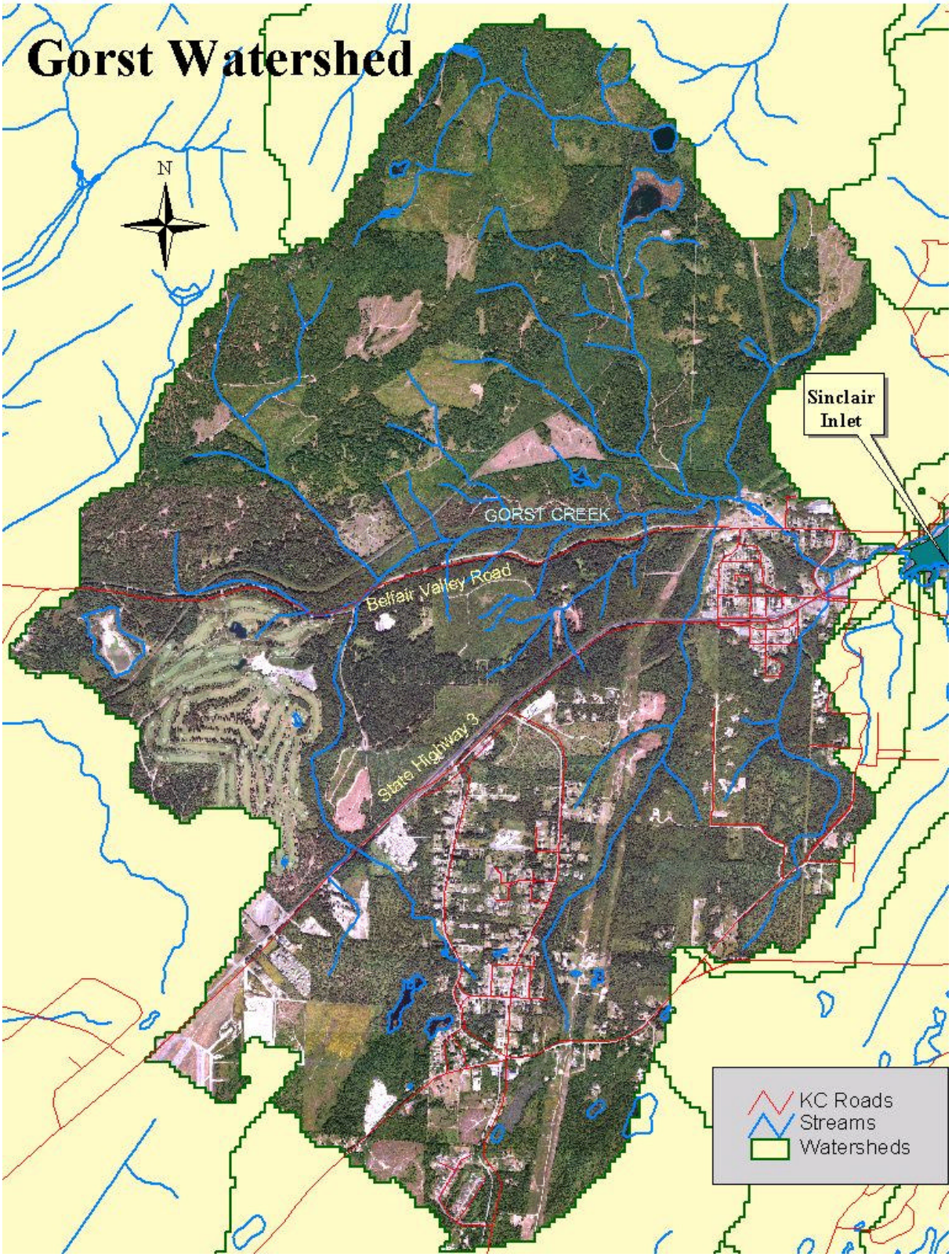

Chico Watershed
N
Dyes Inlet
Wildcat Lake
WILDCAT CREEK
LOST CREEK
DICKERSON CREEK
CHICO CREEK
Kitsap Lake
Chico Watershed
Roads
Streams
Watersheds

Chico Creek Watershed

Salmonid Diversity: Coho, Chinook, Fall Chum, Steelhead & Cutthroat.

The following ranked salmonid habitat restoration actions are recommended for Chico Creek and tributaries:

- Replace the culverts at the SR 3 and Kittyhawk Drive crossings with bridges of sufficient size to allow unrestricted fish passage at all flows, as well as passing sediment and debris; this would allow removal of the upstream Dept. of Transportation trash rack, which is a fish passage barrier when clogged with accumulated debris
- Restore natural channel and floodplain configuration and integrity in Chico Creek from the mouth to the Navy railroad trestle; remove or relocate riprap dikes where feasible
- Restore stream utilization of historic estuarine delta
- Implement low impact development, including stormwater water quantity control and water quality treatment for stormwater runoff; retrofit state-of-the-art stormwater quality and quantity best management practices to existing development in the watershed; ensure that state-of-the-art stormwater protection is provided for the pending development between Kitsap and Dickerson creeks
- Reduce impacts of road crossings, including identified fish passage barriers, increased stormwater runoff to surface waters, water quality impacts from stormwater runoff, and increased fine sediment delivery from road surfaces and associated ditch maintenance; develop and implement a forest road management plan in the Lost Creek drainage to reduce slide impacts from forest roads
- Evaluate potential of restoring natural channel and floodplain configuration in Kitsap Creek along Northlake Way
- Identify and correct cause of high water temperatures in Kitsap Creek (downstream of Northlake Way), as identified in the Bremerton-Kitsap Health District sampling
- Correct the culvert fish passage barrier at the Northlake Way crossing of Kitsap Creek
- Actively monitor the operation of the lake level control boards at the outlet of Kitsap Lake to ensure that unrestricted fish passage is maintained
- Correct the culvert partial fish passage barrier at the Taylor Road crossing of Dickerson Creek
- Develop and implement a short-term LWD strategy in Chico Creek (mouth to railroad crossing), in Kitsap Creek, and Dickerson Creek (mouth to railroad crossing)
- Replace the culverts at the Golf Club Hill Road with a bridge that will provide natural substrate and pass debris
- Assess the fish passage status at high flows of the culvert on Dickerson Creek at and downstream of the railroad crossing; correct if identified as a fish passage barrier
- Remove the dam, or provide unrestricted fish passage, at RM 1.2 on Dickerson Creek (would benefit resident salmonids only, as anadromous salmonids are unable to pass the natural falls downstream)
- Assess fish passage and habitat impacts of corrugated culvert downstream of Northlake Way (likely placed across the creek without HPA approval as a weir to stabilize gravel substrate); correct identified problems

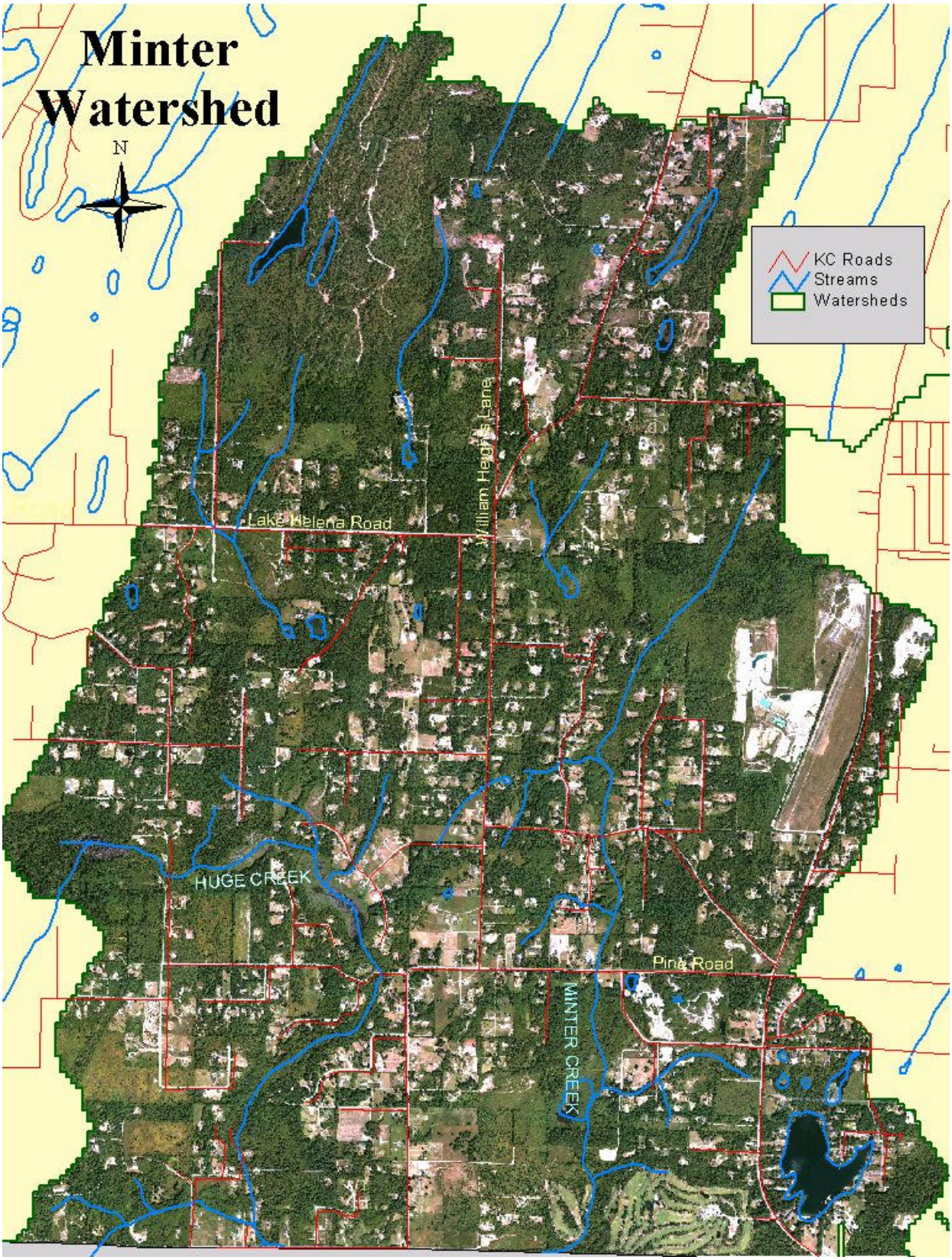

Gorst Watershed
N
Sinclair Inlet
GORST CREEK
Belfair Valley Road
State Highway 3
KC Roads
Streams
Watersheds

Gorst Creek Watershed

Salmonid Diversity: Coho, Chinook (Hatchery), Fall Chum, Steelhead & Cutthroat.

The following ranked salmonid habitat restoration actions are recommended for Gorst Creek and tributaries:

- Promote continued sustainable forestry throughout the watershed
- Restore estuarine function (will likely require acquisition of historic floodplain/estuary from the mouth to Jarstad Park)
- Restore natural channel configuration and floodplain function in the lower 0.8 mile of Gorst Creek; seek removal or relocation of approximately six businesses and 10-12 residences that encroach into the natural floodplain (see plan promoted by former Mayor Glenn Jarstad, in General Comments above)
- Restore functional riparian zones from the mouth of Gorst Creek to the old diversion site at RM 0.8
- Replace culverts at Old Belfair Highway crossings to provide unrestricted fish passage at all flows
- Reduce impacts of road crossings, including identified fish passage barriers, increased stormwater runoff to surface waters, water quality impacts from stormwater runoff, and increased fine sediment delivery from road surfaces and associated ditch maintenance
- Implement low impact development throughout the watershed, particularly on Parish Creek, including stormwater water quantity control and water quality treatment for stormwater runoff; retrofit state-of-the-art stormwater quality and quantity best management practices to existing development in the watershed, particularly those areas located just upstream of SR 3 and the Sunny Slope development adjacent to Parish Creek
- Ensure that development in the Parish Creek watershed incorporates special protection measures to avoid potential of increasing the amount of slide activity or erosion of fine sediment to the watercourse; Parish Creek naturally contributes high levels of fine sedimentation to downstream areas, affecting sediment quality and fish production potential
- Surface water rights currently exceed the instream flow in late summer/early fall; Lead Entity should refer to the HB-2514 Watershed Planning Process for consideration and resolution
- Protect highly productive, shallow intertidal areas of Sinclair Inlet; avoid armoring of additional shorelines on Sinclair Inlet, remove shoreline armoring where practicable
- Reconnect estuarine component north of Gorst Creek that was cut off by construction of the rail line
- Prioritize and correct fish passage barriers at Navy railroad crossings (Jarstad Creek, Heins Creek, and Unnamed 15.0223), at SR3, and elsewhere in the watershed; correct man-made fish passage barriers downstream of Alexander Lake on Heins Creek
- Assess condition and life expectancy of 600-foot long culvert under landfill just upstream of SR 3; develop and implement remedial measures to prevent collapse of the culvert and to ensure continued fish passage
- Develop and implement a short-term LWD strategy for Gorst Creek, from the mouth to RM 2.3, to provide LWD presence and habitat diversity until full riparian function is restored
- Assess habitat conditions in Unnamed 15.0223; correct identified habitat limiting factors, as appropriate
- Identify and correct sources of fecal coliform contamination
- Remove large accumulation of tires from wetland complex in the headwaters of Parish Creek
- Monitor dissolved oxygen levels downstream of Gold Mountain Golf Course, and on Jarstad Creek downstream of Bremerton Forest Road; correct problems as warranted



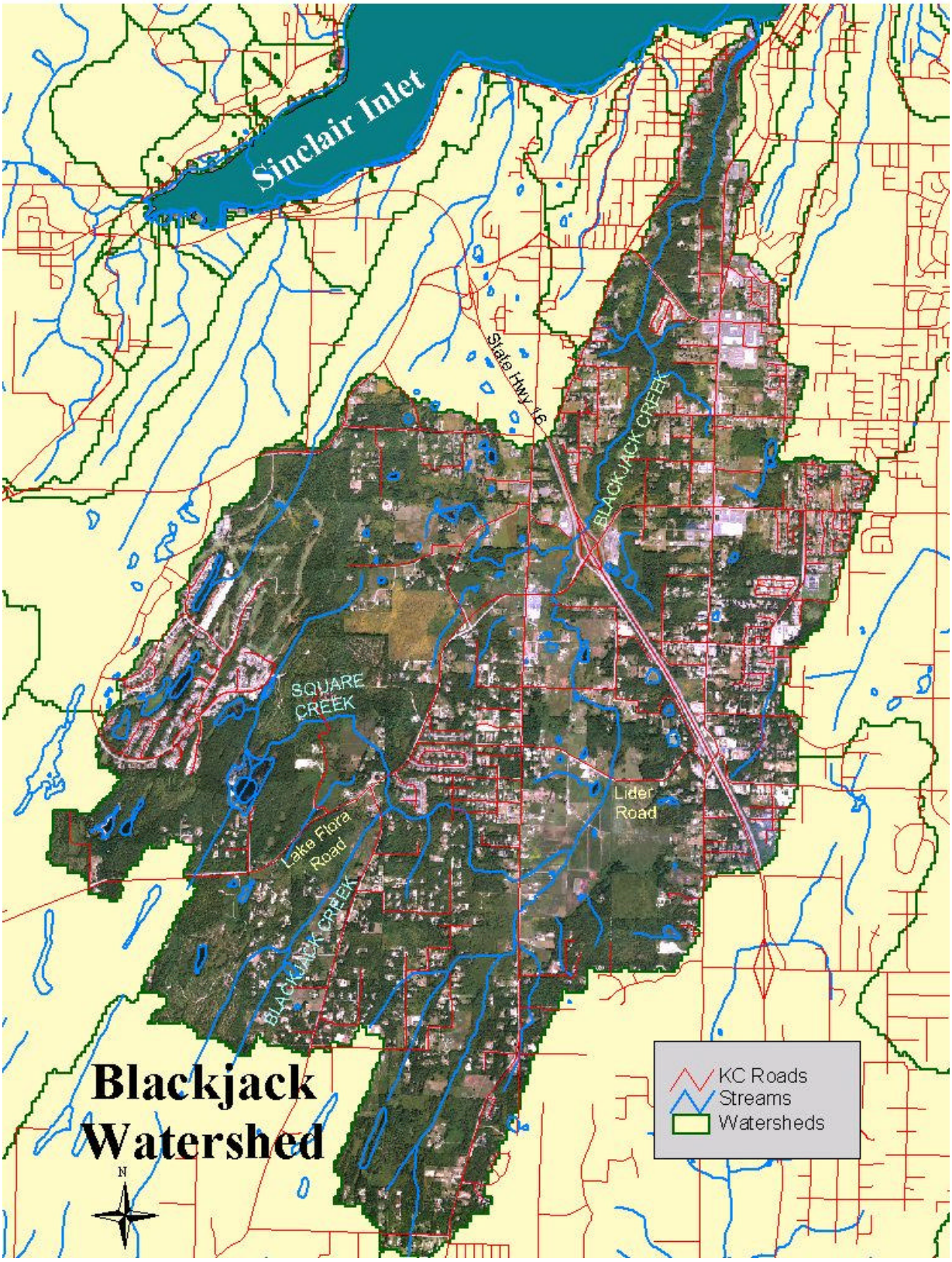
(Note: Missing the Pierce County portion for this figure)

Minter Creek Watershed

Salmonid Diversity: Coho, Chinook, Fall Chum, Steelhead & Cutthroat.

The following ranked salmonid habitat restoration actions are recommended for Minter Creek and tributaries:

- Implement low impact development, including stormwater water quantity control and water quality treatment for stormwater runoff; retrofit state-of-the-art stormwater quality and quantity best management practices to existing development in the watershed
- Reduce habitat impacts on agricultural lands, including development and implementation of farm plans that restore stream functions
- Reduce impacts of road crossings, including identified fish passage barriers, increased stormwater runoff to surface waters, water quality impacts from stormwater runoff, and increased fine sediment delivery from road surfaces and associated ditch maintenance
- Modify the Minter Creek Hatchery water intake structure and correct the hatchery rack operation to provide unobstructed upstream fish passage
- Restore natural channel configuration, floodplain function, and riparian function in the channelized/constrained one-mile stretch along and under 118th Avenue
- Prioritize and correct identified fish passage barriers in the Minter Creek watershed
- Implement a comprehensive program to prevent unrestricted livestock access to Minter Creek and tributaries (the reach on Minter Creek from Huge Creek to Pine Road is identified as one area that would particularly benefit from implementation of agricultural BMPs)
- Identify and correct sources of fine sediment delivery to the watershed
- Develop and implement a short-term LWD strategy in Minter Creek along 118th Avenue and in Little Minter Creek upstream of the County line, to provide LWD presence and habitat diversity until full riparian function is restored
- Restore riparian function on Minter Creek upstream of Pine Road, where the creek flows through a residential development; encourage conifer regeneration in deciduous stands that historically had a conifer component (particularly from the County line to Pine Road
- Evaluate habitat impacts of shoreline bulkheading of outer Minter Bay; remediate impacts where possible
- Assess salmonid habitat conditions in Huge Creek; correct identified salmonid habitat limiting factors, as warranted
- Continue to monitor water quality downstream of Horseshoe Lake; implement corrective measures if warranted

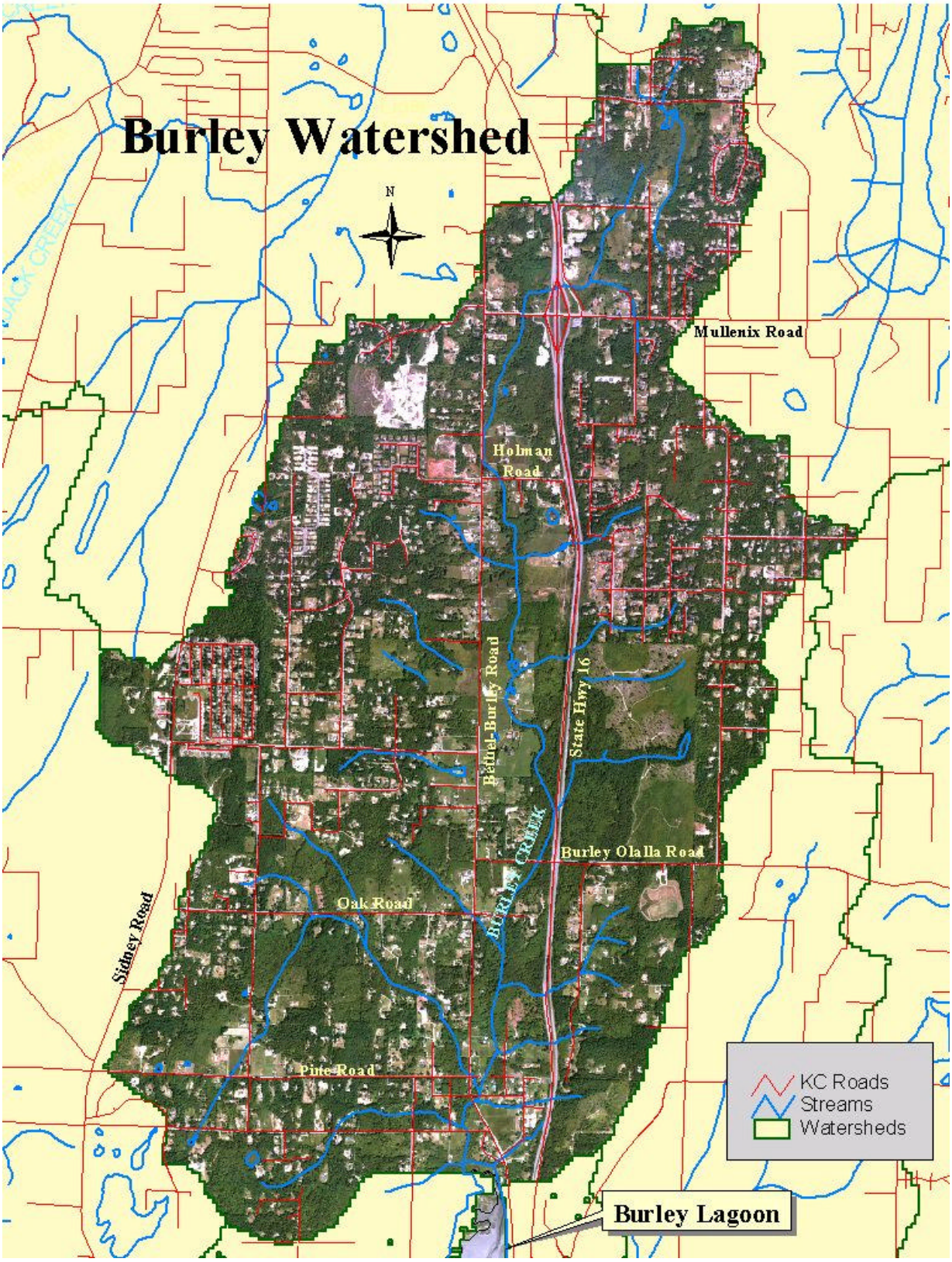

Sinclair Inlet
State Hwy 16
BLACKJACK CREEK
SQUARE CREEK
Lake Flora Road
Lider Road
BLACKJACK CREEK
Blackjack Watershed
N
KC Roads
Streams
Watersheds

Blackjack Creek Watershed

Salmonid Diversity: Coho, Chinook, Fall Chum, Steelhead & Cutthroat.

The following ranked salmonid habitat restoration actions are recommended for Blackjack/Square Creek and tributaries:

- Reduce habitat impacts on agricultural lands upstream of SR 16, including development and implementation of farm plans that restore stream functions; identify and correct areas in the watershed that have unrestricted livestock access
- Reduce impacts of road crossings, including identified fish passage barriers, increased stormwater runoff to surface waters, water quality impacts from stormwater runoff, and increased fine sediment delivery from road surfaces and associated ditch maintenance
- Implement low impact development, including stormwater water quantity control and water quality treatment for stormwater runoff; remediate existing stormwater impacts to the channel
- Protect high quality riparian habitat on Blackjack Creek just upstream of Sidney Road
- Protect/preserve/acquire as much of Square Creek upstream of Sidney Road as possible
- Protect as much of Ruby Creek upstream of Sidney Road as possible
- Protect and restore estuarine habitat (particularly upstream of Bay Street), including restoration of riparian function, and reduction of commercial encroachment, where feasible
- Evaluate fish passage status and upstream habitat the Bethel Road crossing of Unnamed 15.0204, two culverts in the Ruby Creek drainage, and at the Sidney Road crossing of Square Creek; prioritize and correct as warranted
- Restore natural channel configuration and floodplain function on Blackjack Creek through the channelized agricultural area upstream of Sedgwick Road, and through the agricultural area of Ruby Creek downstream of Glenwood Road
- Develop and implement a short-term LWD strategy for lower two miles of Blackjack Creek and Square Creek, to provide LWD presence and habitat diversity until full riparian function is restored
- Restore functional riparian zones throughout the watershed, with particular emphasis on Blackjack Creek upstream of Sedgwick Road, Unnamed 15.0206, and Square Creek
- Remove accumulated garbage and debris in Blackjack Creek through the City of Port Orchard
- Identify and correct sources of fecal coliform contamination
- Monitor dissolved oxygen levels downstream of Sedgwick Road, and on Ruby Creek downstream of Sidney Avenue, correct problems as warranted

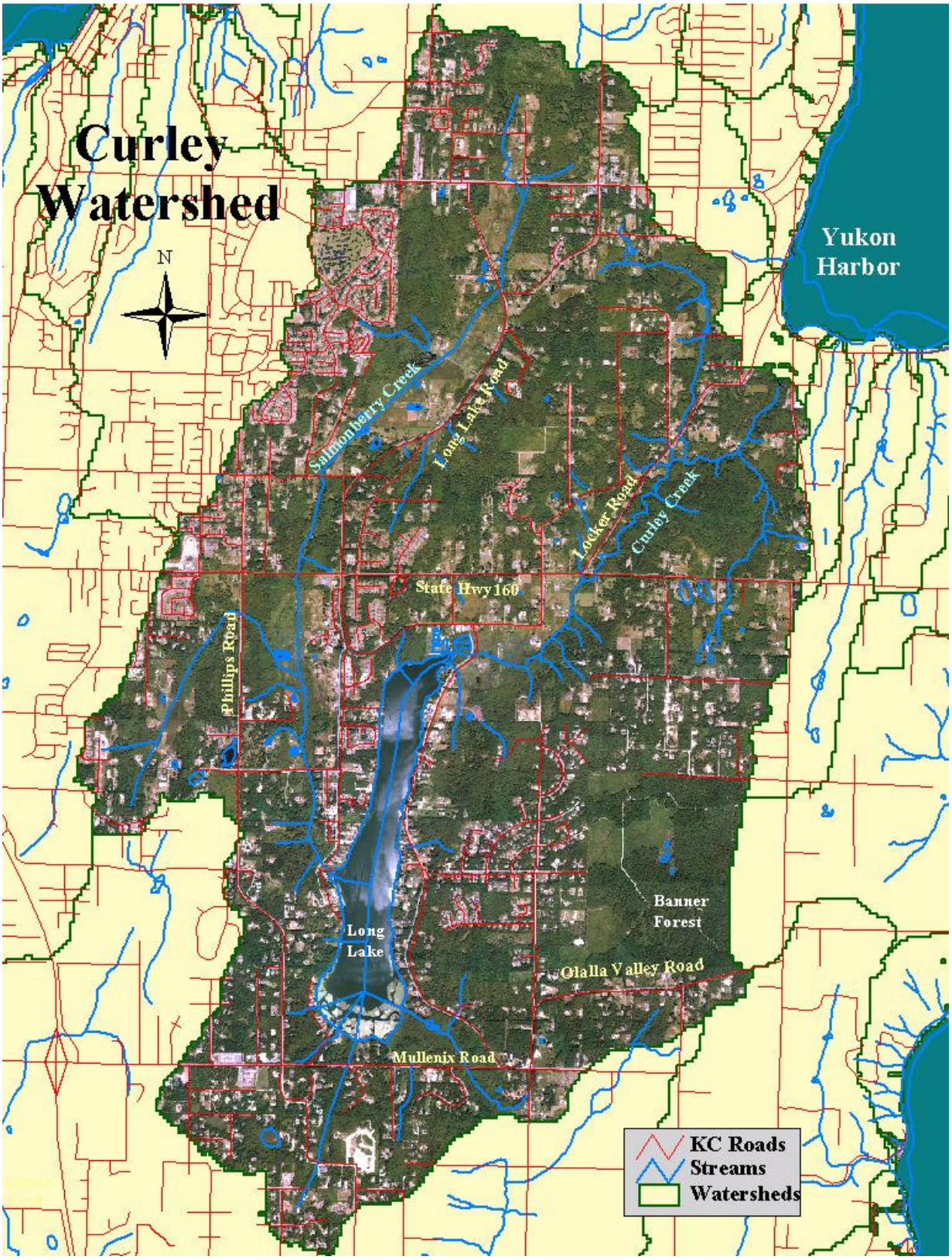

Burley Watershed
N
Mullenix Road
Holman Road
Bethel-Burley Road
State Hwy 16
BURLEY CREEK
Burley Olalla Road
Oak Road
Sidney Road
Pine Road
KC Roads
Streams
Watersheds
Burley Lagoon

Burley Creek Watershed

Salmonid Diversity: Coho, Chinook, Fall Chum, Steelhead & Cutthroat.

The following ranked salmonid habitat restoration actions are recommended for Burley Creek and tributaries:

- Implement low impact development, including stormwater water quantity control and water quality treatment for stormwater runoff; retrofit state-of-the-art stormwater quality and quantity best management practices to existing development in the watershed
- Reduce habitat impacts on agricultural lands, including development and implementation of farm plans that restore stream functions
- Reduce impacts of road crossings, including identified fish passage barriers, increased stormwater runoff to surface waters, water quality impacts from stormwater runoff, and increased fine sediment delivery from road surfaces and associated ditch maintenance
- Protect natural habitat characteristics of upper Burley Lagoon; evaluate habitat impacts of shoreline bulkheading of outer Burley Lagoon, remediate impacts where possible
- Prioritize and correct identified fish passage barrier throughout watershed
- Restore natural channel configuration in channelized portions of Burley Creek
- Implement a comprehensive program to prevent unrestricted livestock access to Burley Creek and tributaries (the reaches on Burley Creek from Spruce Road to Oak Road, and upstream of Oak Road (Iverson), are identified as areas that would particularly benefit from implementation of agricultural BMPs)
- Develop and implement a short-term LWD strategy in the lower 2 miles of BurleyCreek, to provide LWD presence and habitat diversity until full riparian function is restored
- Restore riparian presence and function on Burley Creek from the mouth-RM 0.75 and upstream of RM 2.0; encourage conifer regeneration in deciduous stands from RM 0.75-2.0 that historically had a conifer component
- Restore riparian function through residential areas on Little Bear Creek; encourage conifer regeneration in deciduous stands that historically had a conifer component
- Ensure that County Roads Departments maintain roadside ditches in a manner that does not result in fine sedimentation to creeks
- Identify and correct sources of fecal coliform contamination of freshwater and marine waters

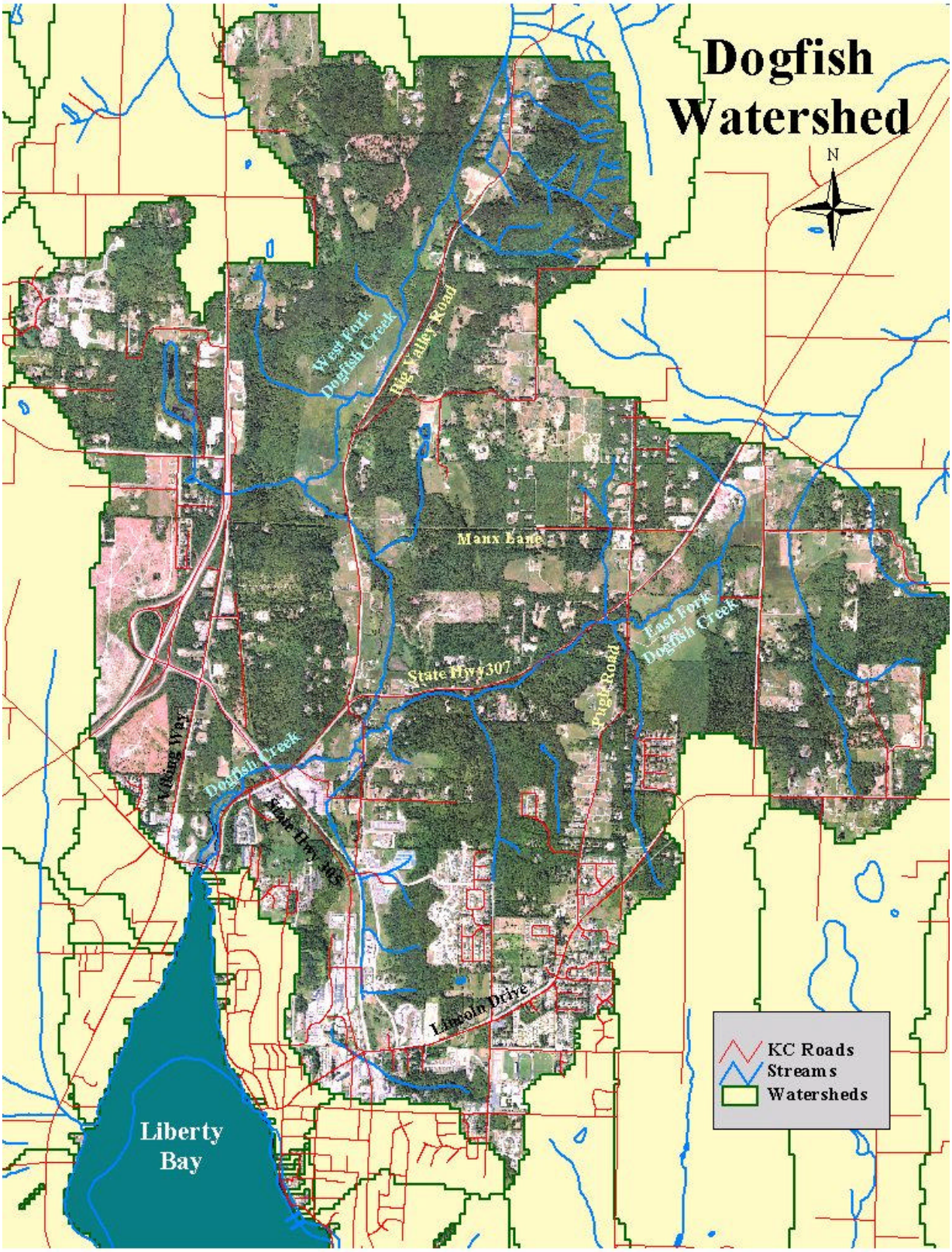

Curley
Watershed
N
Yukon
Harbor
Salmonberry Creek
Long Lake Road
Locker Road
Curley Creek
State Hwy160
Phillips Road
Long
Lake
Banner
Forest
Olalla Valley Road
Mullenix Road
KC Roads
Streams
Watersheds

Curley Creek Watershed

Salmonid Diversity: Coho, Chinook, Fall Chum, Steelhead & Cutthroat.

The following ranked salmonid habitat restoration actions are recommended for Curley/Salmonberry Creeks:

- Protect integrity of natural estuary
- Reduce habitat impacts on agricultural lands, including development and implementation of farm plans that restore stream functions
- Reduce impacts of road crossings, including identified fish passage barriers, increased stormwater runoff to surface waters, water quality impacts from stormwater runoff, and increased fine sediment delivery from road surfaces and associated ditch maintenance
- Implement low impact development, including stormwater water quantity control and water quality treatment for stormwater runoff. Remediate existing stormwater impacts to Salmonberry Creek and Unnamed 15.0187; ensure that stormwater from future development throughout the watershed is fully addressed at the time of construction.
- Manage water chemistry and aquatic vegetation in Long Lake in a manner that protects salmonid habitat conditions in the lake and downstream
- Restore natural channel configuration and function through the Grows Vineyards Golf Course, and through channelized agricultural areas in the watershed
- Develop and implement a short-term LWD strategy to provide LWD presence and habitat diversity until full riparian function is restored, particularly upstream of Sedgwick Road; this strategy also needs to address active removal of standing trees and LWD in the vicinity of RM 0.7-0.8 at the Game Farm (mainstem and Unnamed 15.0187)to supply a private sawmill
- Remove instream pond and associated fish ladder in Unnamed tributary 15.0187 downstream of Locker Road to provide unrestricted fish passage and reliable instream flows downstream of the pond
- Eliminate unrestricted livestock access to channels in the watershed, and identify and correct sources of fine sedimentation (development in the headwaters of Unnamed 15.0187 and Unnamed 15.0189 (upstream of Ashby farm) are specifically noted as contributing a significant silt loads)
- Restore functional riparian zones throughout watershed, particularly in disturbed areas upstream of Sedgwick Road; restore historic wetlands and off-channel habitat, where possible
- Evaluate fish passage status (at all flows) of weir with flow notch just upstream of mouth of Unnamed 15.0187; implement corrective actions as warranted
- Evaluate fish passage status of culvert at Phillips Road crossing of Unnamed 15.0189; implement corrective actions as warranted
- Evaluate habitat conditions in Unnamed 15.0186, correct identified habitat limiting factors
- Recruit local watershed group to remove large amounts of garbage and debris from the channel in Unnamed 15.0187
- Assess benefits to anadromous and resident salmonids of correcting identified fish passage barrier at Sedgwick Road crossing of 15.0186 (WDFW SSHEAR SITEID 991567)

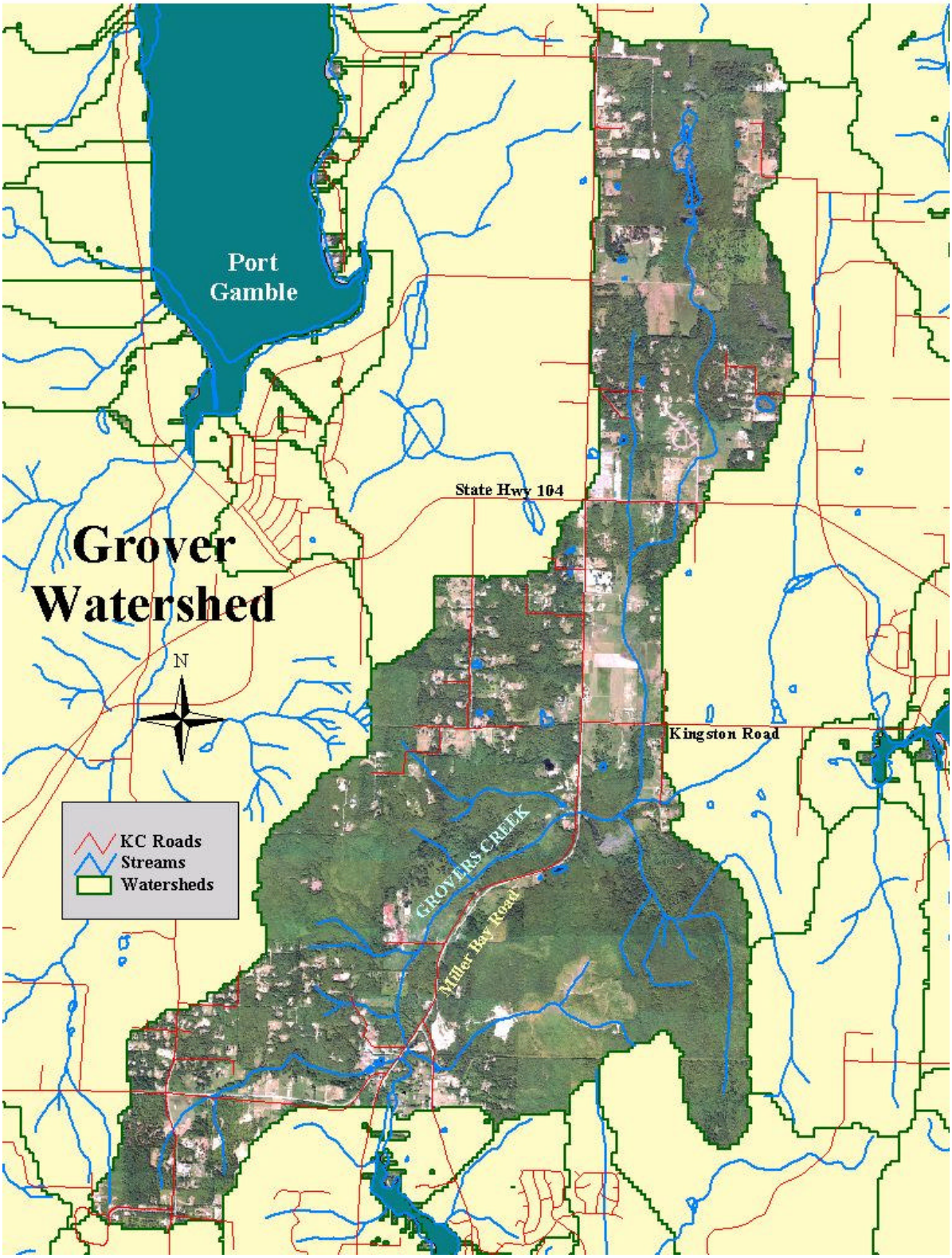

Dogfish Watershed
N
West Fork Dogfish Creek
Big Valley Road
Manx Lane
State Hwy 307
East Fork Dogfish Creek
Pugh Road
Viking Way
Dogfish Creek
State Hwy 305
Lincoln Drive
Liberty Bay
KC Roads
Streams
Watersheds

Dogfish Creek Watershed

Salmonid Diversity: Coho, Chinook, Fall Chum, Steelhead & Cutthroat.

The following ranked salmonid habitat restoration actions are recommended for Dogfish Creek and tributaries:

- Replace culvert at Lindvig Avenue with bridge or culvert sufficient to pass sedimentsand restore tidal influence upstream of the culvert; remove rock weir upstream ofLindvig Way culvert
- Prioritize and correct numerous identified fish passage barriers in this watershed
- Protect integrity of headwater wetlands to maintain controlled instream flow
- Reduce habitat impacts on agricultural lands, including development and implementation of farm plans that restore stream functions
- Implement low impact development, including stormwater water quantity control and water quality treatment for stormwater runoff; retrofit state-of-the-art stormwater quality and quantity best management practices to existing development in the watershed, particularly that contributing to the Caldart Avenue outflow to SF Dogfish; ensure that stormwater from future development throughout the watershed is fully addressed at the time of construction
- Reduce impacts of road crossings, including identified fish passage barriers, increased stormwater runoff to surface waters, water quality impacts from stormwater runoff, and increased fine sediment delivery from road surfaces and associated ditch maintenance
- Restore natural channel configuration and floodplain integrity through agricultural areas in the watershed
- Develop and implement a short-term LWD strategy to provide LWD presence and habitat diversity until full riparian function is restored
- Restore functional riparian zones throughout the watershed; encourage conifer regeneration in deciduous stands that historically had a conifer component
- Identify and correct sources of fecal coliform contamination (particularly in EF Dogfish) and un-ionized ammonia; prevent unrestricted livestock access to creek channels in the watershed
- Identify and correct causes of lower dissolved oxygen levels in EF Dogfish, SF Dogfish, and WF Dogfish

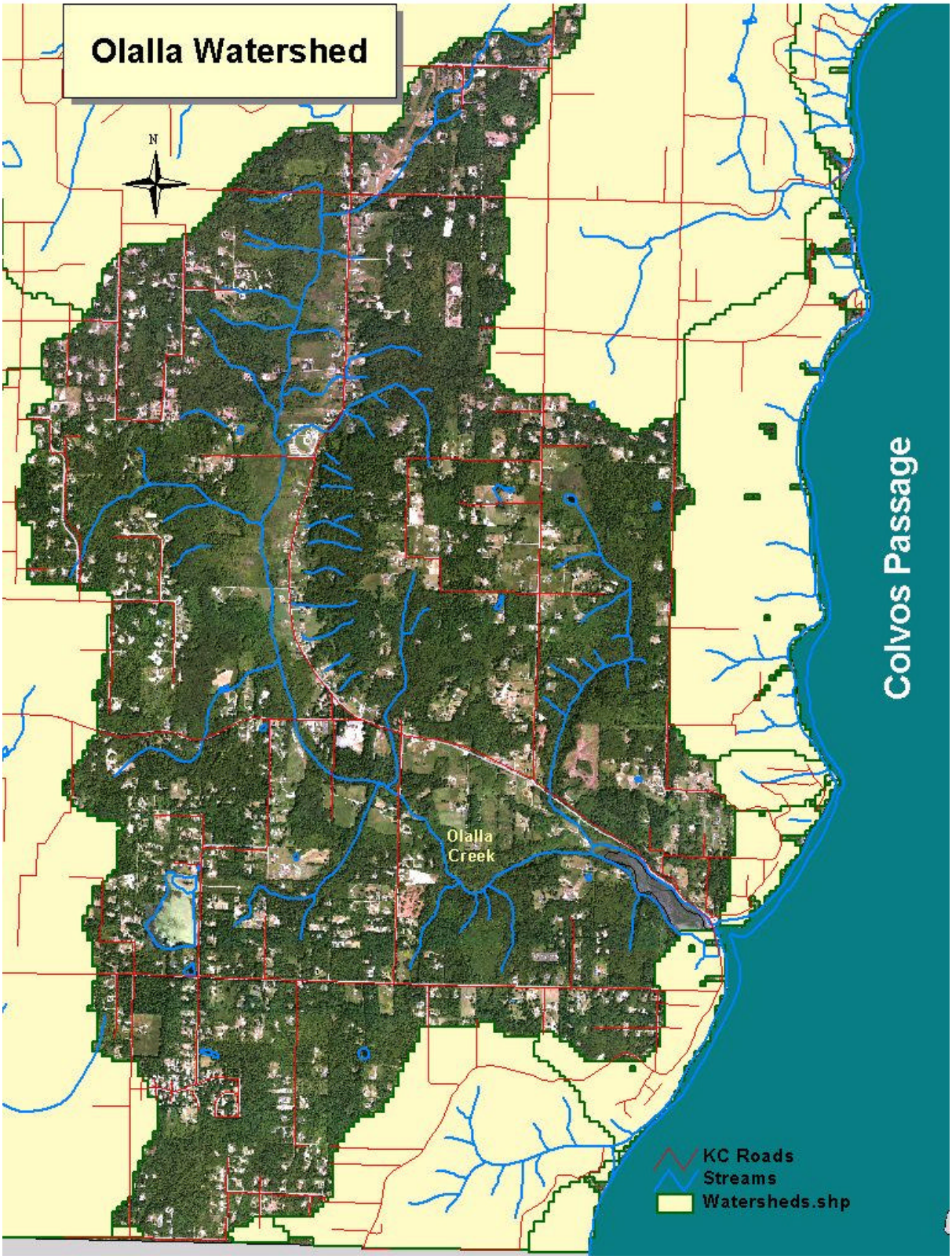

Port
Gamble
State Hwy 104
Grover
Watershed
N
Kingston Road
KC Roads
Streams
Watersheds
GROVERS CREEK
Miller Bay Road

Grovers Creek Watershed

Salmonid Diversity: Coho, Chinook (Hatchery), Fall Chum, Steelhead & Cutthroat.

The following ranked salmonid habitat restoration actions are recommended for Grovers Creek and tributaries:

- Correct fish passage barriers on tributaries near the mouth of Grovers Creek
- Pass spawning adult salmonids upstream of the tribal hatchery weir to fully utilize available spawning and rearing habitat
- Limit further construction of bulkheads and overwater structures in Miller Bay; remove existing structures where feasible
- Reestablish riparian function upstream of West Kingston Road
- Reconnect creek with natural floodplain in the one-mile agricultural reach upstream of SR 104
- Restore natural channel configuration and function in channelized reaches of the watershed
- Prevent unrestricted livestock access to the stream, from Kingston Road to SR 104
- Maintain wetland function throughout the watershed; prevent additional wetland filling associated with residential and commercial development
- Evaluate potential benefits of connecting peat mining ponds with creek to provide additional rearing area, implement is deemed appropriate
- Ensure state-of-the-art stormwater protection on pending development in the headwaters
- Develop and implement a short-term LWD strategy until full riparian function is restored
- Identify and correct source of fecal coliform contamination
- Identify and correct cause of lower dissolved oxygen levels


Olalla Watershed
N
Colvos Passage
Olalla
Creek
KC Roads
Streams
Watersheds.shp

Olalla Creek Watershed

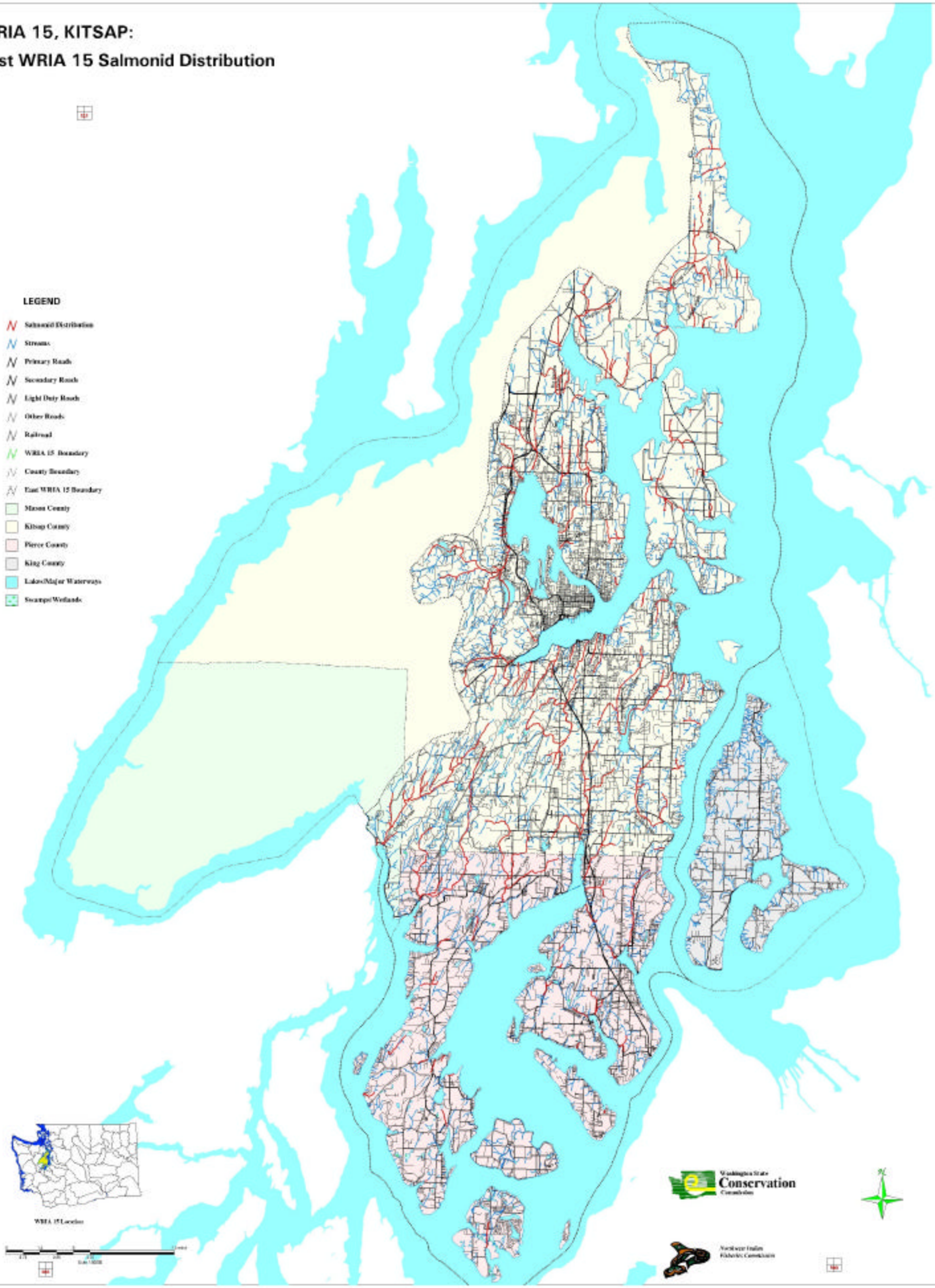
Salmonid Diversity: Coho, Chinook, Fall Chum, Steelhead & Cutthroat.

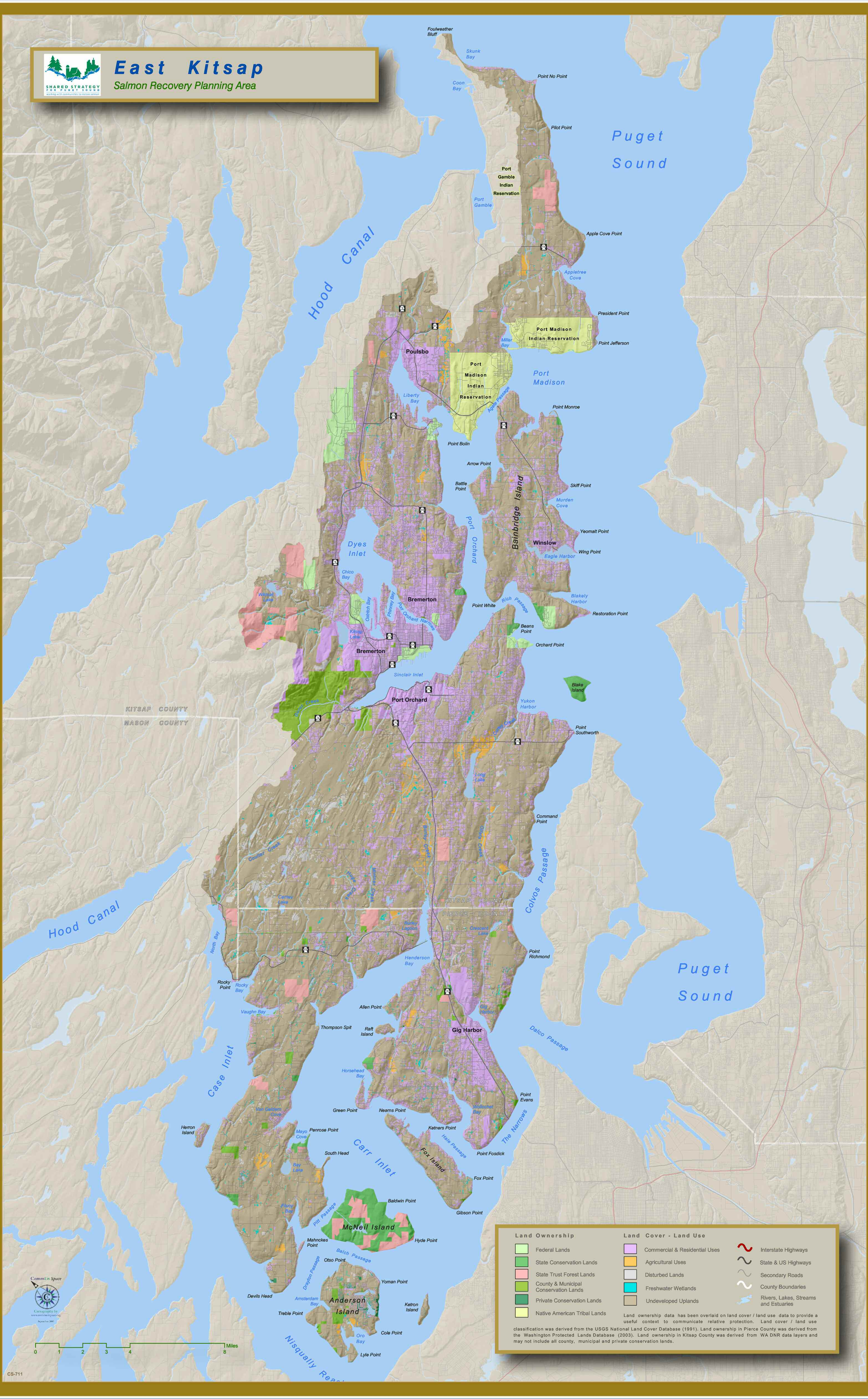
The following ranked salmonid habitat restoration actions are recommended for Olalla Creek and tributaries:

- Correct culvert fish passage barrier at the Olalla Valley Road crossing
- Reduce habitat impacts on agricultural lands, including development and implementation of farm plans that restore creek functions
- Reduce impacts of road crossings, including identified fish passage barriers, increased stormwater runoff to surface waters, water quality impacts from stormwater runoff, and increased fine sediment delivery from road surfaces and associated ditch maintenance
- Implement low impact development, including stormwater water quantity control and water quality treatment for stormwater runoff
- Restore natural channel configuration and function, including historic floodplain wetlands and off-channel habitat (where possible), upstream of RM 2.0
- Restore functional riparian condition through agricultural lands from RM 2.0-3.0; this will also help restore bank stability, and channel and floodplain function in areas severely choked by reed canary grass
- Restore riparian function through the ravine from the mouth to RM 2.0, by encouraging conifer regeneration in deciduous stands that historically had a conifer component
- Develop and implement a short-term LWD strategy to provide LWD presence and habitat diversity until full riparian function is restored
- Pursue acquisition of house and property at upper end of estuary that constricts tidal interchange in the Olalla Creek channel and in Unnamed 15.0108; reconfigure to restore estuarine and channel function
- Remove riprap fill on the estuary at the boat ramp

WRIA 15, KITSAP:

East WRIA 15 Salmonid Distribution





SHARED STRATEGY FOR PUGET SOUND
working with communities to restore salmon
East Kitsap
Salmon Recovery Planning Area
Foulweather Bluff
Skunk Bay
Point No Point
Coon Bay
Pilot Point
Puget Sound
Port Gamble Indian Reservation
Port Gamble
Apple Cove Point
Appletree Cove
President Point
Hood Canal
Port Madison Indian Reservation
Point Jefferson
Miller Bay
Poulsbo
Port Madison Indian Reservation
Port Madison
Agate Passage
Liberty Bay
Point Monroe
Point Bolin
Arrow Point
Battle Point
Skiff Point
Murden Cove
Bainbridge Island
Port Orchard
Yeomalt Point
Winslow
Wing Point
Eagle Harbor
Dyes Inlet
Chico Bay
Wildcat Lake
Ostrich Bay
Phinney Bay
Port Orchard Narrows
Bremerton
Point White
Rich Passage
Blakely Harbor
Restoration Point
Beans Point
Orchard Point
Kitsap Lake
Bremerton
Sinclair Inlet
Blake Island
Gorst Creek
Port Orchard
Yukon Harbor
Curley Creek
Point Southworth
KITSAP COUNTY
MASON COUNTY
Long Lake
Command Point
Coulter Creek
Burley Creek
Olalla Creek
Huge Creek
Minter Creek
Colvos Passage
Carney Lake
KITSAP COUNTY
PIERCE COUNTY
Burley Lagoon
Crescent Lake
Hood Canal
North Bay
Henderson Bay
Point Richmond
Rocky Point
Rocky Bay
Puget Sound
Allen Point
Vaughn Bay
Gig Harbor
Thompson Spit
Raft Island
Gig Harbor
Dalco Passage
Case Inlet
Horsehead Bay
Point Evans
Van Geldern Cove
Green Point
Nearns Point
Wollochet Bay
Herron Island
Mayo Cove
Penrose Point
Ketners Point
The Narrows
Carr Inlet
Hale Passage
South Head
Point Fosdick
Bay Lake
Fox Island
Fox Point
Filucy Bay
Pitt Passage
Baldwin Point
McNeil Island
Gibson Point
Mahnckes Point
Hyde Point
Balch Passage
Otso Point
Drayton Passage
Yoman Point
Devils Head
Amsterdam Bay
Anderson Island
Ketron Island
Treble Point
Cole Point
Oro Bay
Nisqually Reach
Lyle Point
CommEn Space
Cartography by www.commenspace.org
0 1 2 3 4 8 Miles
CS-711
Land Ownership
Federal Lands
State Conservation Lands
State Trust Forest Lands
County & Municipal Conservation Lands
Private Conservation Lands
Native American Tribal Lands
Land Cover - Land Use
Commercial & Residential Uses
Agricultural Uses
Disturbed Lands
Freshwater Wetlands
Undeveloped Uplands
Interstate Highways
State & US Highways
Secondary Roads
County Boundaries
Rivers, Lakes, Streams and Estuaries
Land ownership data has been overlaid on land cover / land use data to provide a useful context to communicate relative protection. Land cover / land use classification was derived from the USGS National Land Cover Database (1991). Land ownership in Pierce County was derived from the Washington Protected Lands Database (2003). Land ownership in Kitsap County was derived from WA DNR data layers and may not include all county, municipal and private conservation lands.